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ABSTRACT

Funded through the 1994 School-to-Work (STW) Opportunities Act, state STW systems must serve all students but have tended to have an urban focus because private sector resources are more available in urban areas. Although effective, urban models that rely on large employers have been difficult to replicate in rural areas. In November 1997, state and local teams and individuals from nine northeastern states attended a conference to share ideas, strategies for success, and promising practices related to STW in rural schools. In this document, conference presentations and workshop summaries provide practical technical assistance for rural STW programs. Entries include: "Making Entrepreneurship Education Work: The REAL Enterprises Model" (Rick Larson, Lisa King, Mark McGee, Brendon Shea); "Small College + Small Communities + Industry: Share Our Strategies for Success" (Eugene McCluskey, Ray Chelewski, Timothy Crowley, David Lee); "Vermont Employer/Teacher Internship Program" (Robin Morton, Albert Zielenski); "Innovation and Imagination: Advancing the Virtual Classroom in Rural New England" (Yvonne Damborg, Kathy Flynn, Rick Nastri); "New York Wired: Connecting Schools" (Jeffrey Perlee); "School-to-Work Risk Management" (Greg Voorheis, Gregg Meyer, June Van Houten); "Building Business Awareness in Rural New York" (Jean Stevens, Robert Drake, Candace Huber, Betty Powers, Kris Reuland); "School-to-Work Transition: Developing Collaborative Partnerships for the Inclusion of Students with Disabilities at the State, County and Local Level" (Lucy Ely-Pagan, Bob Haugh, John Grover, Nancy Lauria, Kerry McKenna); "School-to-Career Project-Based Learning: A Teacher Friendly Workshop" (Ronald Millican); and "Connecting Learning and Work: Roles and Leadership for Higher Education" (Danial Via, Ivan Charner, Judy Nelson, Lee Williams, Jan Wilson). This proceedings also includes profiles of speakers and presenters; an extensive glossary of school-to-work terms developed by the National School-to-Work Office, a joint initiative of the Departments of Education and Labor; and summaries of "open space proceedings" (small group discussions). (SV)

ED 420 471

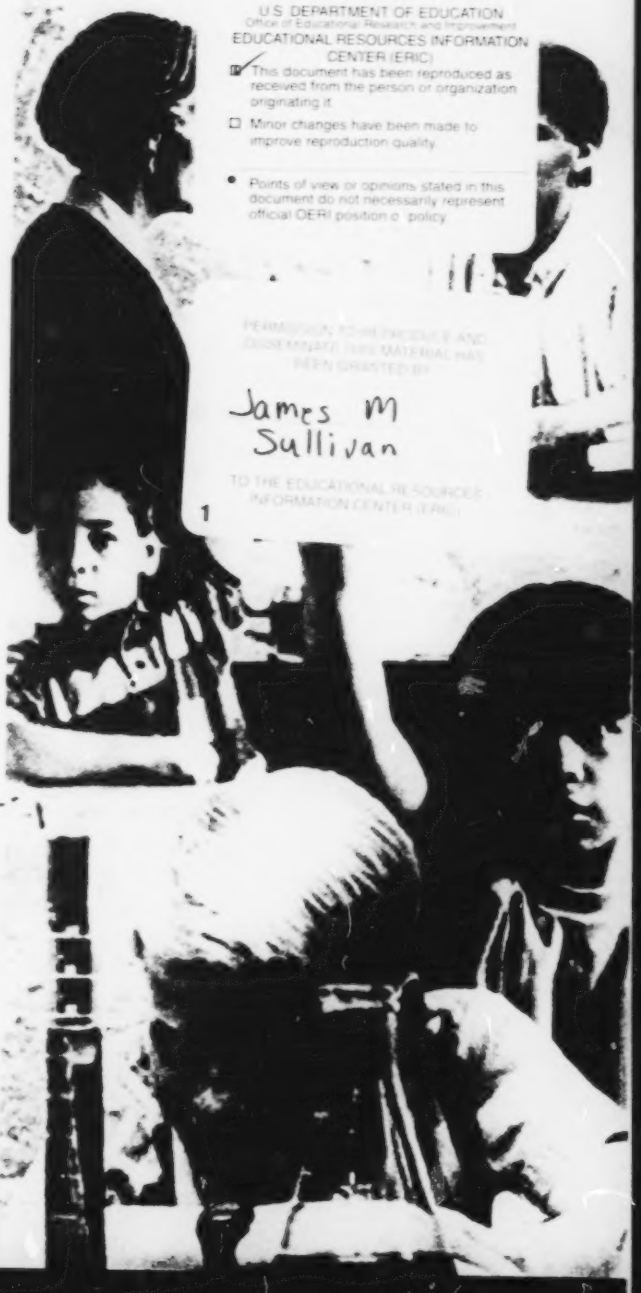
Connecting LEARNING & work:

the RURAL EXPERIENCE

School to Work

"High expectations are needed for all students. Serving students in rural areas is a particular challenge, requiring ingenuity and determination."

adapted from:
Connecting Learning & Work:
A Call to Action



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RC 021578

CONNECTING LEARNING AND WORK
The Rural Experience

November 17, 1997

Dear Conference Participants:

Welcome to Connecting Learning and Work: The Rural Experience.

This technical assistance conference on school-to-work (STW) in rural communities was designed to provide all participants an opportunity to share effective strategies for helping rural youth acquire the knowledge and skills needed for employment and effective citizenship. Through a series of workshops, presentations and planning activities, over 200 school-to-work partners from nine Northeast states joined together to ensure that rural students are provided access to programs, resources and activities that have proven successful.

To assist state and local communities in planning and implementing STW program strategies, a series of "how-to" workshops were presented. This Technical Assistance Manual, developed from those workshops, provides practical technical assistance on effective, cost-efficient programs to meet the needs of youth.

Thank you for your participation.

Connecting Learning and Work: The Rural Experience
Conference Planning Committee

RC021534

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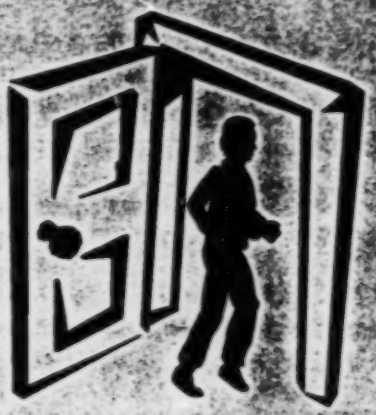
Introduction



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Introduction

Across the nation, schools are increasingly turning to school-to-work (STW) programs and services to meet the diverse needs of students as they prepare for educational reform, workforce preparation and economic development. School-to-work systems in states must serve all students and provide equal access to all program components for youth throughout the state. Historically, STW programs primarily had an urban focus simply because most of the private sector resources critical to success were located in urban areas. These programs relied heavily on larger employers who had the resources and flexibility to provide work-based learning opportunities for both students and teachers. As effective as these models were, they are difficult to replicate in rural communities. Yet students in rural communities have the same needs for comprehensive, state-of-the-art programs and services as their urban counterparts. They also deserve equal opportunity to have their needs met.

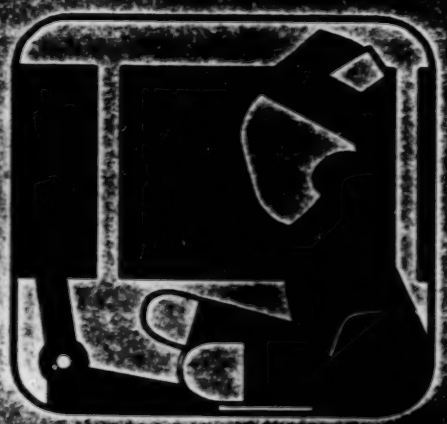
Rural schools provide a rich diversity of educational services for youth. Small schools with informal structures, strong values inherent in local communities and the uniqueness and diversity among rural communities offer good opportunities for connecting school-to-work. The commitment of rural communities to educating their children provides a strong foundation for growth and development of today's students. On the other hand, certain variables, such as fiscal restraints due to small tax bases, recruitment and retention of teachers, and geographic factors limiting the availability of services often hamper the ability of schools in rural areas to provide comprehensive services. The Education Commission of the States' recent report, titled ***Connecting Learning and Work: A Call to Action***, indicates: "Serving students in rural areas is a particular challenge, requiring ingenuity and determination."

The New York State Rural Education Advisory Committee (REAC) recently completed a major study titled: ***Implementing School-to-Work in Rural Counties***. Based on the needs expressed by rural districts throughout New York State, there were strong recommendations to develop opportunities to share ideas, strategies for success and model programs across regions. Proposed topics included: linking school-to-work efforts with academic achievement; strengthening parent and teacher involvement; expanding involvement of business and industry; increasing collaboration and employment opportunities for students; designing school-based experiences; and creating options to address geographic distance and transportation issues.

The need to share ideas and solutions among rural districts exists not only within New York State, but across the nation. About 60% of our nation's schools are rural. In a desire to learn from others and to share in developing solutions, the REAC extended an invitation to other states in the Northeast to join together in a partnership to promote promising practices in rural schools and to collaborate on strategies for reaching higher standards. Recognizing a need to help rural communities establish effective STW strategies in the Northeast as well as the rest of the nation, the Education Commission of the States, the National Conference of State Legislatures and the Academy for Educational Development joined with the REAC and the states as national partners to co-sponsor this initiative.

Through this partnership, ***Connecting Learning and Work: The Rural Experience*** was developed as a technical assistance conference for the rural school-to-work community to share ideas, strategies for success and promising practices to expand opportunities for all rural students. State and local teams and individuals from Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island and Vermont joined together in the two-day conference and participated in a series of "how-to" workshops. This Technical Assistance Manual, developed from those workshops, provides practical technical assistance to help rural communities provide effective STW programs and services for all their students.

Making Entrepreneurship Education Work: The REAL Enterprises Model



Presenters: Rick Larson
Lisa King
Mark McGee
Brendon Shea

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Background

For decades, economic dislocation and stagnation in rural communities across the United States have placed rural youth in a trap. Trained to be applicants for a steadily decreasing number of good jobs, high school graduates are forced to choose between two equally unsatisfying options: staying in the local community to pursue limited job opportunities, or leaving to "seek their fortune" elsewhere, either in further education or in employment in urban areas.

More often than not, rural youth choose to leave. Rural towns and counties suffer gravely from this outflow of talent, which saps communities of the leadership and brainpower needed to craft strategies for surviving, let alone thriving, in an increasingly complex world.

At the same time, the US economy, particularly since 1980, has become increasingly entrepreneurial. Large employers have been downsizing, outsourcing work that was previously done in-house to smaller, entrepreneurial companies. These newer companies have generated by far the lion's share of new jobs over the past five years. (Indeed, most high school graduates today will end up working for a number of different employers, many in industries *that don't even exist yet.)* What's more, fully 20% of Americans now are self-employed.

The nature of work in organizations of all sizes has changed, too. Companies and organizations large and small are looking for "intrapreneurial" employees, those who can identify and act upon opportunities in their workteam, division or company. The ability to solve problems, make decisions and work effectively with colleagues and customers alike is today just as important as specific technical skills.

For all these reasons, entrepreneurial education needs to be included in school-to-career systems, particularly in rural areas, where the opportunities for traditional School-to-Work approaches (e.g., apprenticeships) are few and far between. Rural students need to learn to be job *creators*, not just job *applicants*, so that they can see and seize opportunities in their local communities and workplaces, either as entrepreneurs or as employees.

Since the early 1980's, REAL Enterprises (Rural Entrepreneurship through Action Learning) has been equipping schools to contribute to the economic and community development of the communities they serve, by encouraging entrepreneurial talent and the creation of sustainable businesses. Founded by Dr. Jonathan P. Sher, a nationally recognized authority on rural education and development, and Dr. Paul DeLargy, a leading community educator in Georgia, REAL now operates in over 200

elementary, secondary and post-secondary institutions in 30 states. REAL Enterprises has proved to be a successful strategy for linking rural schools and communities through student entrepreneurship.

How It Works

REAL Entrepreneurship is an experiential course of study taught for credit in high schools and post-secondary institutions, and through community-based organizations. At the high school level, REAL Entrepreneurship is typically taught over a school year (or for a semester on a 4 X 4 system). Post-secondary REAL programs may range from 22 weeks to two semesters in length.

In REAL, students explore the realities and rewards of small business ownership by:

- assessing their personal strengths, abilities, and goals;
- analyzing the local community;
- identifying business ideas that meet local needs;
- researching and writing business plans for a chosen venture; and
- opening and operating their own "honest to goodness" enterprises.

Enterprises begun by students (based on the feasibility of the business plan) "graduate" with the students who create them. Enterprises may include:

- micro-enterprises,
- home-based businesses,
- community services, and
- full-scale businesses.

Some examples of enterprises begun by REAL students include: computer sales and service, craft studio, manufacturing, formal wear, alternative agriculture, furniture making, automotive repair, welding, HVAC service, Internet marketing, lawn service, catering, office product liquidation, recycling, child care, and entertainment.

The REAL classroom is experiential, meaning that students learn by undertaking and reflecting upon activities that are essential to the completion of their business plan and the eventual running of their businesses. Students participate in a wide range of group activities. (The REAL Curriculum Guide contains over 160 such activities designed to help students build small business skills and knowledge, and develop critical thinking and life skills.)

The community serves as the laboratory for the REAL class. Students research their business ideas by gathering information about potential competitors and suppliers, locations, and markets in the community. A Community Support Team of entrepreneurs,

lawyers, bankers, and others concerned with economic and community development serves as mentors and advisors for students (and colleagues for the REAL instructor).

Who Participates in REAL?

Schools typically "cast a wide net" in recruiting students for the REAL program. High school REAL students between 1991-1995 were roughly divided equally among college preparatory, general, and vocational "tracks." More females than males enroll in REAL, and REAL participants mirror the demographics of their states. The majority of participants wish to remain in their local community.

REAL at the high school level is designed for students in grades 11 and 12. At the community college level, REAL is offered both to full-time students in business and vocational courses of study who need to know how to make a successful living from their technical skills, and to the general public on a continuing education basis.

Elementary and middle school model

REAL Enterprises launched Mini-REAL, an elementary and middle school program fostering entrepreneurship, career awareness, and community involvement, in 1996. In the K-5 program, students create their own community, complete with a school specific currency, a marketplace comprised of student-run businesses, a revenue/banking realm, and a judiciary system. Students apply for and hold a different job every semester, choosing from over 100 different opportunities ranging from entrepreneur to mayor and from lawyer to tax collector.

At the middle school level, REAL focuses on deepening student understanding of and involvement in the local community, through the identification and implementation of specific projects planned by students.

REAL Partnership

A three-way partnership is essential to the creation and maintenance of a successful REAL program.

A school provides:

- an instructor(s) with administrative support and adequate planning time;
- time and space for a non-traditional classroom and coursework; and
- a high quality educational experience for students.

The community provides:

- a source of learning and research for students;
- businesses and business service providers;
- mentors/advisors who serve on the REAL Community Support Team; and
- patronage of student enterprises.

REAL Enterprises organizations provide:

- curriculum and resource materials (a 5-volume REAL Curriculum Guide, student workbooks, and integrated computer software);
- training, networking, and support for instructors (including a required 40-hour summer Institute held annually, follow-up in-service seminars, and on-going site visits);
- technical assistance to student entrepreneurs (including access to start-up capital in some areas);
- program evaluation (collection of demographic information about REAL students and measures of student learning in the areas of business knowledge and critical thinking and life skills); and
- publications and electronic networking (a quarterly newsletter, The REAL Story and an e-mail network for teachers).

Getting Started

To establish a REAL program, a school or community must identify an instructor for the program who can attend the REAL Institute and commit to teaching the program in his or her school. REAL instructors typically:

- have an interest in learning new teaching practices that help them reach all students,
- have some knowledge of, or background in, business or entrepreneurship, and
- are willing to lead the implementation of a new program in their institution.

In Pennsylvania, Maine and Vermont, schools must apply to the REAL Enterprises organizations in those states, which are responsible for providing follow-up support to REAL teachers and schools. Schools form a partnership with these state REAL organizations to implement the program. In other Northeastern states, schools or teachers should contact national REAL directly. (See "Contacts" below.)

The REAL Institute will be held in 3 locations across the US in the summer of 1998; separate Institutes for Mini-REAL (elementary and middle school) will also take place.

Budget

The cost for establishing a REAL program is approximately $4,000, which includes the cost of attending the REAL Institute (1 year only), follow-up in-service seminars (for 2 years), student workbooks, and other start-up costs. Attendance at a 2nd year of the Institute is highly recommended (cost: an additional $700 - $1000). In those states with state REAL organizations (PA, VT, ME), grants may be available to defray some of the initial implementation costs.

On-going expenses following start-up include a $50.00/year curriculum site license fee and incidental expenses related to the course (copying, phone calls, postage, etc.) estimated at $150/year.

In all states, local STW partnership funds can be used for the cost of curriculum materials or teacher training. REAL is recognized as an official technical assistance provider by the national School-to-Work office.

Other sources which have helped fund REAL in local communities include: vocational education monies, Appalachian Regional Commission, contributions from local entrepreneurs and bankers, and rural electric cooperatives.

REAL Enterprises is a 501(c)(3) organization funded by grants from The Pew Charitable Trusts and the Annenberg Rural Challenge, curriculum and training fees, and state organization membership fees.

Results

Evaluations of REAL have found that the program successfully helps youth and adults alike develop entrepreneurial and small business knowledge and expand their critical thinking and life skills. Studies by the Center for Human Resources at Brandeis University (April, 1996) and West Virginia University (May, 1997) are available from national REAL for $5.00 each.

The program has also demonstrated its ability to help individuals from rural communities create and operate enterprises. For example, between 1991-97 in North Carolina, REAL participants started 212 new businesses and expanded, improved or purchased 132 more. These enterprises created a total of 280 full- and part-time jobs and generated more than $5 million in new sales revenue.

In addition to its positive impacts on students and communities, REAL has proven to be an extremely beneficial experience for teachers, who have praised the REAL Institute as

an exceptional learning opportunity and demonstrated significant gains in their use of experiential teaching methods.

Barriers to Overcome

Like any worthwhile initiative, REAL requires school systems and postsecondary institutions to invest human and financial resources if the program is to succeed. Helping educational institutions -- particularly those which are underfunded -- understand the importance of experiential entrepreneurship education is an important step in securing this commitment.

Contact Persons

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Small College+Small Communities+Industry Share Our Strategies for Success

Presenters: Eugene McCluskey
Ray Chelewski
Timothy Crowley
David Lee

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Background

According to the executive summary of Workforce 2000, a publication of the US Department of Labor, "The new jobs in service industries will demand much higher skill levels than the jobs of today. Very few new jobs will be created for those who cannot read, follow directions, and use mathematics. Ironically, the demographic trends in the workforce, coupled with the higher skill requirements of the economy, will lead to both higher and lower unemployment: more joblessness among the least-skilled and less among the most educationally advantaged." These trends raise a number of important policy issues. If the United States is to continue to prosper - if the year 2000 is to mark the end of the first American century - policymakers must find ways to:

"Improve the Educational Preparation of All Workers: As the economy grows more complex and more dependent on human capital, the standards set by the American educational system must be raised."

In addition, the need for technical preparation (Tech Prep) programming has been clearly documented by the US Department of Education and supported by the United States Congress. And focusing at the regional level, in Northern and Eastern Maine, approximately 7,800 students attend secondary schools. Of this number, approximately 4,000 will be impacted by the improved Tech Prep Curriculum.

Clearly, as the academic and technical skills of the secondary students are improved, the number of graduates from technical colleges will increase. The immediate recipient will be the employers of the state as the number of skilled technicians entering the workforce will be enlarged. To meet this challenge by implementing a Tech Prep course of study leading to four years of a balanced focused technical education, the Northern and Eastern Maine Tech Prep/School-To-Work Consortium will improve the academic and workplace skills of those students who will be America's workers at the beginning of a new century of global technology.

Several vocational and technical programs duplicated content in both the secondary regional vocational centers and the technical colleges. As these overlaps are eliminated, the taxpayers of the state will benefit from greater value for each dollar spent on education. Eliminating duplication of program content and ensuring articulation between secondary and postsecondary technical education will allow for education dollars to have greater impact on students in the consortium district.

What It's All About

Tech Prep was introduced into the State of Maine in August, 1991. The Northern and Eastern Maine Tech Prep/School-To-Work Consortium was formed at that time and includes all of Aroostook County, the northern two-thirds of Penobscot County and the northern two-thirds of Washington County, our most "down east" county. The geographical area described above encompasses approximately 40% of the State of Maine with Aroostook County alone encompassing an area as large as the states of Connecticut and Rhode Island combined. The consortium unites 28 high schools, 7 regional technology centers and 2 technical colleges, and the University of Maine system. A Steering Board consisting of high school principals, area superintendents, representatives from business and industry, and secondary and postsecondary instructors provide leadership for the consortium.

The primary founders were the administrators of Northern Maine Technical College and Washington County Technical College along with area vocational directors, high school principals and superintendents. The Northern and Eastern Maine Tech Prep/School-To-Work Consortium represents educators and employers in three counties and has facilitated the change from a traditional curriculum poorly serving the non-college bound student to the hands-on, Tech Prep applied curriculum. Staff development has been the major factor in the success of this Tech Prep/School-To-Work effort, combined with employer input, formal articulation agreements and the introduction of technology into the classroom.

The program philosophy is to develop a new course of study which combines two years of high school with two years at the technical college and, where there is an articulation agreement established, an additional two years at the university. Stronger linkages between the high schools, vocational centers, technical colleges and the four year institutions in our state are also promoted.

The goals of the initiative are to:

- Strengthen the Northern and Eastern Maine Consortium for the purpose of developing occupational programming that satisfies Tech Prep guidelines and encourages students to pursue careers in technology;

- Foster appropriate technical preparation (Tech Prep) courses of study at high schools or vocational centers and regions for articulation into various curricula at the technical colleges;

- Ensure that basic and advanced academic and workplace skills (including mathematics, science, communication and appropriate technologies) will be integrated into every Tech Prep course of study;
- Convert these existing courses of study to competency-based curricula;
- Continue to develop and implement staff development activities for faculty designed to facilitate the implementation of Tech Prep;
- Develop and implement staff development activities for student support personnel designed to facilitate recruitment of students into occupational programming;
- Maximize, for members of special populations, access to and equitable participation in the entire range of occupational programs;
- Utilize knowledge and expertise of labor representatives, business and industry, and community leaders in partnerships;
- Phase out the "General" course of study;
- Develop specific curricula articulation agreements between secondary and postsecondary institutions in the Consortium;
- Foster the implementation of a work-based learning component as an integral part of Tech Prep Program of Studies; and
- Foster the integration/blending of academic subject matter with vocational subject matter and/or the integration/blending of vocational subject matter with academic subject matter.

As noted in the goals, staff development is an integral part and possibly the most important part of implementing new curriculum into any program of studies. Teachers themselves have commented that staff development is crucial on every evaluation sheet that has been received by this office. Support groups for the sharing of ideas and experiences have been organized in this consortium and are well attended.

How It Works

This consortium is divided into six partnerships. Because the geographical area is so large, workshops are held in each partnership to shorten time spent traveling between schools for meetings. Consortium teachers using the applied curriculum have developed networking support groups which meet monthly in roundtable discussions answering questions about implementing the applied curriculum in their schools and demonstrating the use of lab equipment, etc. These are the teachers who have overcome the turf issues which have surrounded them for years realizing that if they are willing to work together and share experiences, their students will be the benefactors.

The way in which the technical college faculty and administrators have given of their time and talents to high school superintendents, principals and teachers is a totally new occurrence in northern Maine. For example, Mr. John Levasseur, Physics Instructor at NMTC, attended a workshop in Waco and has given several workshops in various schools in our consortium. The Tech Prep coordinator is the most instrumental person in bringing together faculty and administrators (secondary and postsecondary) for these types of activities.

This consortium has developed 121 competency-based articulation agreements. One of the agreements, Agri/Business, is a 2+2+2 involving grades 11 and 12 at the high school, 13 and 14 at Northern Maine Technical College, and grades 15 and 16 culminating with a BS degree from the University of Maine.

Of the consortium's many accomplishments, the single most outstanding accomplishment is the Agri/Business Articulation Agreement. This agreement was the first of its kind in the state. The concept has been replicated twice with a focus on the Pulp and Paper Industry. It is in the process of being replicated again, focusing on the Food Service and Hospitality Industries. The Agri/Business agreement was first signed in 1993. To date, seven students have met the parameters of this agreement and are enrolled at Northern Maine Technical College to earn their Associates Degree in Business Administration. This agreement was featured in the 1997 Articulation Report of the New England Board of Higher Education. Also, copies of this agreement have been requested by nine other states. In 1995, this agreement was presented in one of the breakout sessions at the League for Innovations Conference in New Orleans. Most recently, in November 1997, this consortium was recognized by the Region I Chapter of the American Vocational Association as the "Outstanding Business/Educational Partnership" in Maine, and will also be recognized at the National A.V.A. Conference in Las Vegas, December 1997.

Program Competency Based Articulation Agreements

NMTC Course #	Description of NMTC Courses	# of Competencies
BUS221	Principles of Agri/Business Management	47
ABF121	Automotive Body Repair	55
SES113	Production Formatting Skills I	110
SES115	Keyboarding Speed Production I	1
	Business Technology "Accounting"	Description Only
BUS223	Farm Management I	26
BUS225	Farm Management II	58
BUS231	Marketing Farm Commodities	19
	Business Technology "Management"	Description Only
	Business Technology "Marketing"	Description Only
CPT111	Residential Construction	143
COW210	Agri-Business Experience Program	27
DRT113	Drafting	52
	Electrical Engineering Technology	Description Only
ELS112	Basic Electricity/Electronics I – Lecture	Description Only
ELS113	Basic Electricity/Electronics I – Lab	224
MAT021	Technical Math	92
MAT113	Elementary Algebra	123
MAT120	Intermediate Algebra	171
PHE120	Occupational Fitness	35
PHY013	Principles of Technology	516
	Pulp and Paper Technology	Description Only
	Nursing	167
SHM111	Sheet Metal Technology	31
SHM121	Sheet Metal Technology	29
SHM211	Sheet Metal Technology	10
SHM 221	Sheet Metal Technology	21
	Plumbing and Heating Technology	251
	Diesel Hydraulics Technology (& Small Engine Serv.)	544
	Total Number of Competencies:	2,752

Budget

Annual Program Budget

Category of Expenditures	AMOUNT REQUESTED ANNUALLY
Personnel Costs	
1. Salaries (Itemize)	
A. Coordinator	42,987
B. Clerical	20,572
2. Fringe Benefits (Itemize)	22,546
Sub-Total	86,105
All Other Direct Costs	
1. Professional Services (Contractual)	2,100
2. Travel	2,600
4. Postage, Printing	750
6. Miscellaneous Exp. (Describe or	5,245
(*Meetings, Dues, Periodicals, etc.)	
7. Supplies (Itemize + $300)	1,200
8. Educational Grants	
Sub-Total	11,895
TOTAL	98,000

Results

There have been many positive results since this initiative's inception. The most visible result has been the change in attitude of both faculty and students regarding the difference between applied learning and education. Northern Maine Technical College has been the lead institution in promoting change among the consortium partners, and to date, 121 detailed articulation agreements have been formalized.

Also, approximately 85% of the schools of this consortium are involved in one or more components of applied curriculum. The "General Program" has been eliminated in all consortium schools with 30% – 35% of the schools having a clearly defined Tech Prep Program of Studies. Every high school in the Northern and Eastern Maine Tech

Prep/School-To-Work Consortium has implemented one or more of the Tech Prep applied academic courses (Applied Communication, Applied Math, Applied Bio/Chem, Principles of Technology, Economics at Work and Civics at Work). These changes were necessitated by the fact that 50%-60% of the school population, the "neglected majority," were falling through the cracks or getting lost in the "general track."

At a Tech Prep conference held in Caribou, Maine, in June, 1992, to which all teachers throughout this consortium were invited, information and copies of the curriculum were distributed to each high school. Teachers were encouraged to gather as much information as possible related to the implementation of "hands on" materials. Several area principals and teachers attended the first NTPN conference in Chicago earlier that year. *The transformation had begun.*

Teachers began to try the Tech Prep applied curriculum in bits and pieces in their classes. The students were enthusiastic and the teachers liked the results.

The benefits of the applied curriculum allow students to expand their educational opportunities to ensure that they are provided with a focused curriculum relevant for achieving success at the next higher level of learning or for employment.

The bottom line for the success of the Northern and Eastern Maine consortium curriculum changes can in large part be measured by the tallying of numbers. From the school year 1993-94 to the school year 1994-95, Principles of Technology saw an increase of 228%; the enrollment for Applied Math rose from 191 to 567; Applied Communication enjoyed an increase of more than 1,000% and, in its first year, articulated courses have an enrollment of 413, a truly impressive number of students. *By any standard for success, Tech Prep/School-To-Work is happening in this consortium.*

Barriers To Overcome

There are always barriers to overcome with every new initiative. These are the challenges that we must overcome:

- Distance;
- Turf;
- Egos;
- Budget;
- Entrenched teaching methodology; and
- Time.

Contact Persons

ADMINISTRATOR	SCHOOL	PHONE	ADDRESS
Dick Durost, Superintendent of Schools	Easton High School	(207) 488-7702	P.O. Box 66 Easton, ME 04740-0066
Kermit Pooler, Principal	Fort Kent Community High School	(207) 834-5540	55 Pleasant Steet Fort Kent, ME 04743
David Wiggin. Superintendent of schools	Houlton High School	(207) 532-6551	Bird Street Houlton, ME 04730
Bryan Artes, Principal	Penobscot Valley High School	(207) 732-3111	P.O. Box 328 Cross Street Howland, ME 04448
Ray Chelewski, Instructor	Presque Isle Regional Technology Center	(207) 764-1356	79 Blake Street Presque Isle, ME 04769
Paul J. Bouchard, Director	St. John Valley Technology Center	(207) 543-6606	P.O. Box E Upper Frenchville, ME 04784
Jerry White, Superintendent of Schools	Wisdom Middle/High School	(207) 543-7717	P.O. Box 137 St. Agatha, ME 04772
Timothy Crowley, Vice President/ Academic Dean	Northern Maine Technical College	(270) 768-2811	33 Edgemont Drive Presque Isle, ME 04769
Darin McGaw, Dean of Continuing Ed.	Washington County Technical College	(207) 454-1000	River Road Calais, ME 04619

ACTIVITY PLAN

GOAL I: Strengthen the Northern and Eastern Maine Tech Prep/School-To-Work Consortium for the purpose of developing occupational programming that satisfies Tech Prep guidelines and encourages students to pursue careers in technology.

#	OBJECTIVE	DATE	COMMENT
1.	The organizational structure will be reviewed annually and revised if necessary to assure the citizens of the area are served effectively.	Ongoing	Steering board will be responsible. The review will take place at the October meeting
2.	The consortium will continue to invite four year public institutions of higher education to participate in Tech Prep activities.	Ongoing	Steering Board and the Tech Prep coordinator will be responsible.

GOAL II: To foster appropriate technical preparation (tech prep) courses of study at regional high schools or vocational centers for articulation into various curricula at the technical colleges.

#	OBJECTIVE	DATE	COMMENT
1.	Develop a comprehensive sequence of academic and technical courses from grade 9 through completion of a two-year technical college program.	Ongoing	Steering board will assign leadership responsibility to each partnership in developing focused curriculum. This will be overseen by the Tech Prep coordinator.
2.	Provide advanced standing credit options enabling qualified secondary students to earn technical college credit for comparable courses.	Ongoing	Technical college will award advanced placement to students with appropriate technical preparation according to articulation agreement(s) in effect
3.	Develop strong comprehensive links between regional secondary schools and NMTC and WCTC, as evidenced by articulation agreements.	Ongoing	

GOAL III To ensure that basic and advanced academic and workplace skills (including mathematics, science, communications, and appropriate technologies) will be integrated into every tech prep course of study.

#	OBJECTIVE	DATE	COMMENT
1.	Appropriate secondary curricula will be revised to assure that basic and advanced academic and work place skills are incorporated.	Ongoing	Curriculum task forces. Curriculum revisions will begin in some schools by August 1993, and are proceeding to be consortium wide.

GOAL IV Convert three existing courses of studies to competency based curricula.

#	OBJECTIVE	DATE	COMMENT
1.	Continue to utilize DATUM charts to identify the essential competencies for articulation purposes.	Ongoing	
2.	Revise curriculum of plumbing and heating technology, welding technology, and autobody technology programs to implement the competency based instruction.	Ongoing	Curriculum Task Forces with the aid of instructors and craft committees of occupational areas who are the advisory committees.

GOAL V To continue to develop and implement staff development activities for faculty designed to facilitate the implementation of tech prep.

#	OBJECTIVE	DATE	COMMENT
1.	Provide ongoing staff development to assure effective and efficient curricula revision.	Ongoing	Conducted by each partnership team for its members; several completed.
2	To continue to develop support groups in each applied academic area	Ongoing	Task Force and Tech Prep coordinator
3	To continue to provide workshops integrating academic and occupational courses	Ongoing	
4	Provide professional development workshops in Applied Communications, Bio/Chem., Math II, Principles of Technology, involving secondary and post-secondary teachers.	Ongoing	

GOAL VI Continue to develop and implement staff development activities for student support personnel designed to facilitate recruitment of students into occupational programming.

#	OBJECTIVE	DATE	COMMENT
1.	Provide workshops addressing concepts of Tech Prep.	Ongoing	
2.	Provide workshops and seminars as necessary to communicate the critical importance of academic skills for occupational programs.	Ongoing	
3.	Broaden the knowledge of guidance counselors on the opportunities available to students in Tech Prep programming.	Ongoing	Tech Prep coordinator will present workshops for student support personnel

GOAL VII Maximize, for members of special populations, access to an equitable participation in the entire range of occupational programs.

#	OBJECTIVE	DATE	COMMENT
1.	Review (for both existing and new programs) curricula designed and facilities to ensure curricula can accommodate members of special populations.	Ongoing	Preparatory Special Services Committee, with assistance from NMTC counselor.

GOAL VIII Utilize knowledge and expertise of labor representatives, business and industry and community leaders in partnerships.

#	OBJECTIVE	DATE	COMMENT
1.	A procedure will be developed to ensure that each partnership has appropriate representation from labor, business, industry and communities.	Ongoing	Establish private sector committee. Procedures have been developed and will be modified annually.
2	Add one business representative to each partnership	Ongoing	

GOAL IX To phase out the "General" course of study.

#	OBJECTIVE	DATE	COMMENT
1.	Secondary curricula will be reconstructed to provide students greater opportunities for higher education.	Ongoing	Contingent upon approval for individual schools by their respective school board(s) and/or superintendent.

GOAL X To develop specific articulation agreements between secondary and post-secondary institutions in the consortium.

#	OBJECTIVE	DATE	COMMENT
1.	Each partnership will have a minimum of four specific articulated curricula agreements in place by May 1996.	Ongoing	Approved by faculty and administration of participating institutions.

GOAL XI To foster the implementation of a work-base-learning component.

#	OBJECTIVE	DATE	COMMENT
1.	A work-base-learning experience will be written into each program of studies in accordance to individual community policies	Ongoing	This will be collaboratively developed by business & industry representatives and local educators
2.	To implement Work-base-learning experiences which will relate to academic and/or vocational standards of local school-based-learning experiences. Work-base-learning experiences would include one or more activities such as: • field trips • job shadowing • service learning • school-based-learning experiences (ie.building a house and selling, school farm, etc.) • part-time work • internships • co-op programs • apprenticeship programs	Ongoing	This experience will be collaboratively coordinated and evaluated through pre-existing entities so-as not to create additional and unnecessary duplication of effort.
3.	All students enrolled in a Tech Prep program of studies will, as a seamless aspect of his/her individual educational plan, participate in a work-base-learning experience.	Ongoing	Actual number of students will be determined by enrollment

Goal XII: To foster the integration/blending of academic subject matter with vocational subject matter and/or the integration/blending of vocational subject matter with academic subject matter.

#	OBJECTIVE	DATE	COMMENT
1.	Provide staff development workshops focused on promoting understanding of various academics and vocational/technology education learning strategies.	Ongoing	This will be, in part, a cooperative effort with TEAM Tech Prep; workshops will be coordinated through this Tech Prep office.
2.	To identify and list competencies for academic and vocational learning strategies.	Ongoing	This will be accomplished by educators and business and industry representatives within partnerships in collaboration with the competencies developed at NMTC and WCTC and in conjunction with DACUMS and the standards identified in the SCANS report.
3.	To identify commonalties of competencies among various academic and vocational learning strategies. (E.g. math competencies employed within the residential construction industry, or residential construction competencies that address the practical applications of math competencies, etc.)	Ongoing	This will be facilitated by the Tech Prep coordinator.

Vermont Employer/Teacher Internship Program

Presenters: Robin Morton
Albert Zielenski

BEST COPY AVAILABLE

Background

The Vermont Employer/Teacher Internship Program was started in 1992 as a collaborative effort between the Math Coalition and VISMT (Vermont Institute for Math, Science and Technology, an NSF funded organization to systematically reform math, science and technology education in Vermont). The initial goal was to place science and math teachers in related internships in businesses. In 1995, the STW Initiative joined the collaboration and the goal was expanded to teachers of all disciplines.

What It's All About

The Vermont Employer/Teacher Internship Program (VETIP) - a component of the federally-funded Vermont School-To-Work Initiative - is designed to give educators and employers a field experience which promotes and strengthens business/school partnerships and increases school-to-work learning opportunities for K-14 students.

Qualified educators, whose professional development interests match with meaningful projects in the workplace, will be interviewed and hired by employers to work full-time for six weeks during the summer. The internship experience provides educators and employers with a direct cultural exchange - allowing educators to experience workplace practices and relevant workplace skills and allowing employers to learn about their product, service or practices through the eyes and questions of professional educators.

Teachers integrate their experience into their Individualized Professional Development Plans required for Vermont licensing. The educator and employer will be mutually responsible for further developing their partnership throughout the following school year, reporting on their experience to the full faculty and at least one local business organization, and creating a final product or portfolio.

The internship experience gives educators direct access to other workplaces and increases awareness of current business practices, trends and relevant workforce skills. Educators and business professionals work together to help students make vital connections between learning in the classroom and application to careers and work. Positive changes, in both content and teaching methods, provide improved academic experiences for today's students.

The VETIP goals are to improve student learning and to build strong business/school partnerships. In this way, it supports the learning goals established in Vermont's Framework of Standards & Learning Opportunities. Teachers support these goals by acquiring motivation and knowledge useful to their teaching

Employers support them by gaining greater understanding of the educator's perspective through the internship experience. Outcomes of the VETIP experience are:

- Increased communication and understanding among employers, educators and other community partners;
- Enhanced learning opportunities for children,
- Teachers and students making strong connections between classroom skills and workforce skills;
- Better prepared students entering the workforce;
- A viable avenue for teacher and employer professional development and growth; and
- Employer deriving direct organizational benefits from the professional contributions of teachers.

Getting Involved

Vermont businesses cannot find enough skilled employees to fill the jobs currently available. Employers are saying they are having to provide basic math and writing skills to many of those just exiting high school. Vermont has an 18 percent high school dropout rate. This number is disproportionately higher in rural areas where there is a lack of access to resources.

- Fifty percent of Vermont high school graduates go on to college. Of these, only 25 percent will receive a four-year degree.
- The Vermont State College system has reported that 30% of college freshmen need remedial courses in writing and math.
- Very few employers understand the challenges of teaching and student behavior.
- The rapid development of technology means that students need to continually develop their skills to be able to use technological innovations in the workplace and in the community.

How It Works

The Vermont Employer/Teacher Internship Program (VETIP), through a grant from the federally-funded School-To-Work (STW) Initiative, has developed a comprehensive program to link businesses and schools. The fourteen regional STW coordinators and their volunteers recruit qualified educators and employers, assist employers in identifying needed projects for educators to complete, facilitate the planning and implementation of the 6-week summer internship, and facilitate the on-going evaluation and relationship-building of the school and business.

The VETIP goals are to improve student learning and to build business/school partnerships. In this way, it supports the learning goals established in Vermont's Framework of Standards & Learning Opportunities. Teachers support these goals by acquiring motivation and knowledge useful to their teaching. Employers support them by gaining greater understanding of teaching through the internship experience. Outcomes of the VETIP experience are:

- Increased communication and understanding among employers, educators and other community partners;
- Enhanced learning opportunities for children;
- Teachers and students making strong connections between classroom skills and workforce skills;
- A viable avenue for teacher and employer professional development and growth;
- Better prepared students entering the workforce; and
- Employers deriving direct organizational benefits from the professional contributions of teachers.

Benefits for Employers

By becoming an internship sponsor, employers will:

- have a short-term project of value completed by a professional;
- support the move toward high-quality, standards-based teaching and learning in your schools;
- gain public and press acknowledgment of your investment in the schools and the children;
- develop a lasting relationship with the students, teachers and administrators;
- improve performance levels of incumbent employees who participate as educator supervisors;
- raise the awareness and visibility of your products and services to an important group of educators and families;
- ultimately, assist in preparing the future workforce for your business by increasing skills and employability of students;
- ultimately, reduce the costs of recruiting selecting and training new workers;
- allow your employees to share in the pride of participating in a project that will help their children; and
- have the opportunity to earn three undergraduate or graduate credits.

Criteria for Employer Participation

By becoming an internship sponsor, your company can interview and employ one or more professional educators for 6 weeks in the summer to:

- review and revise employee training programs;
- revise training manuals;
- assist in training;
- design databases, web sites, in-house newsletters, marketing materials, etc.;
- analyze data;
- special department projects;
- test markets; and
- you name it!

Internships cost between $2,000 - $3,000 depending on comparable, professional salary for the proposed work. (In some regions, there are federal funds available to support a portion of the internship costs for the first year.)

To participate as an internship supervisor, we ask you and/or a designated employee to agree to:

- Support the move toward high-quality, standards-based instruction in your schools;
- Act as "ambassador of change" - promote community partnerships as an educational improvement strategy;
- Make a commitment to building an on-going relationship with the teacher and school;
- Set clear expectations and responsibilities for the teacher intern;
- Attend one orientation and one follow-up session;
- Meet regularly with the intern to review performance;
- Support release-time for internship supervisor to make a presentation before faculty;
- Attend year-end evaluation presentation;
- Opportunity to earn three undergraduate or graduate credits; and
- Sign letter of agreement to this effect.

As a result of your commitment your regional school-to-work collaborative and VETIP will:

- Formally recognize your VETIP participation before the full faculty and in the regional press;

- Assist you in designing a work plan with your intern;
- Facilitate the orientation and supervision process;
- With your teacher intern, inform you of the student learning outcomes; and
- Support all activities developed between your business and the school.

Benefits to Educators and Students

By becoming an VETIP intern you will:

- learn valuable new skills from a new worksite;
- support the move toward high-quality, standards-based teaching and learning in your schools by connecting your internship experience to your individual professional development plan;
- gain public and press acknowledgment of your commitment to teaching and students;
- develop a lasting relationship with the employees of your sponsoring business;
- raise the awareness and visibility of your increased knowledge to your faculty and administration;
- earn between $2,000 - $3,000 during 6 summer weeks, depending on comparable, professional salary for the proposed work; and
- earn three graduate credits.

Criteria for Educator Participation

The application process is competitive. K-12 teachers, administrators, guidance counselors and post-secondary educators may apply. Teachers from all content areas and specialties will be considered. Applicants will be screened by the regional school-to-work site coordinators. Finalists will be matched with regional employers who have identified specific business needs which align with the teacher's interests, skills and professional goals. Employers will interview and select candidates who best meet qualifications for the project.

In order to qualify and be accepted, we ask that you agree to:

- Act as the primary person responsible for facilitating the year-long partnership between your sponsoring business and your school;
- Support the move toward high-quality, standards-based instruction in your schools;
- Act as "ambassador of change"- promote community partnerships as an educational improvement strategy;
- Attend one orientation and one follow-up session;

- Integrate individual professional development goals with the VETIP experience;
- Fulfill the six week summer worksite requirements for payment of salary;
- In the fall, conduct follow-up presentation, with employer supervisor, to faculty concerning the experience and ways to integrate it into the class and/or school;
- Document changes in instruction throughout school year and create a "product" to demonstrate change;
- By the spring of the following year, conduct end-of-year presentation of product and evaluation to school supervisor, employer and employer supervisor; and
- Sign letter of agreement to this effect.

Benefits to the School

By becoming a VETIP school you will:

- Support the move toward high-quality, standards-based teaching and learning in your schools;
- Gain public and press acknowledgment of your commitment to community partnerships and educational improvement;
- Develop a lasting relationship with the sponsoring business;
- Support the sharing of the internship experience with other colleagues and community members; and
- Raise the awareness and visibility of your progressive education efforts to the community.

Criteria for School District Participation

In order for the VETIP experience to have a successful impact on student learning, commitment of the school and or district administration is crucial. An important component of the VETIP application process is agreement by a school administrator. We ask that you:

- Make a commitment to supporting the goals of the VETIP experience through the planning, implementation and follow-up phases;
- Act as "ambassador of change" - promote community partnerships as an educational improvement strategy;
- Commit to building an on-going relationship with the sponsoring employer;
- Support VETIP in-service presentations for faculty;
- Support integration of VETIP experience with the teacher's individual professional development plan;
- Attend year-end evaluation presentation; and
- Sign letter of agreement to this effect.

STW Regional Coordinators &/or Volunteers Benefit Too

By facilitating VETIP partnerships in your region you will:

- Support the move toward high-quality, standards-based teaching and learning in your schools;
- Gain public and press acknowledgment of your commitment to community partnerships and educational improvement;
- Develop a finite task for some members of your partnership;
- Build a self-sustaining program with documented outcomes; and
- Raise the awareness and visibility of your progressive education efforts to the community.

Responsibilities of STW Regional Coordinators &/or Volunteers

In order for the VETIP experience to have a successful impact on student learning, the consistent facilitation of the partnership is crucial. An important component of VETIP is agreement by the regional STW coordinator and/or designated volunteers to: recruit employers and educators for the program; attend orientation and follow-up sessions; facilitate awards and press coverage; and administer the completion of the final evaluation. We ask that you and/or your designated volunteers:

- Make a commitment to supporting the goals of the VETIP experience through the planning and implementation, and evaluation phases;
- Act as "ambassadors of change" - promote community partnerships as an educational improvement strategy;
- Commit to supervising and promoting the on-going relationship between the school and the employer; and
- Attend orientation, follow-up session and year-end educator presentation; and
- Sign letter of agreement to this effect.

Budget

The program has been coordinated for the past two years by a part-time coordinator who assisted local partnerships in recruiting both businesses and teachers. A handbook and a related course through the University of Vermont was also developed. The cost of the program varies in each location. Some STW partnerships have paid the wages of the intern in order to get more businesses to try out the program. In other locations, businesses pay the intern. The hope is that each region will be able to assume the coordination once the foundation has been established, thus lessening the need for statewide coordination.

Connecting Learning and Work 3.7
Vermont Employer/Teacher Internship Program

Results

The program has been very successful and the number of teacher/interns has grown each year as well as an increased number of businesses who participate. Business partners report satisfaction with being able to use high skilled teachers in projects and having a closer relationship with education. Teachers report that the experience has changed both what they teach and the way they teach.

Contact Person

Robin Morton
Vermont Chamber of Commerce
Business-Education Partnership
PO Box 649
Montpelier, VT 05601
Phone: (802) 223-0603
E-mail: mortons7@aol.com

SCHOOL TO WORK

The Vermont Employer/Teacher Internship Program

EMPLOYER INTEREST FORM

NAME OF COMPANY: _____ DATE_____

CONTACT PERSON:_____ TITLE: _____

CHIEF EXECUTIVE OFFICER: _____

ADDRESS: _____ BUSINESS PHONE: _____

_____
(ZIP)

E-MAIL _____ FAX _____

REGIONAL SCHOOLS OF INTEREST TO YOU OR YOUR BUSINESS:

_____

ADDRESS_____

PROJECTS UNDER CONSIDERATION FOR INTERNSHIP:_____

_____

_____

TECHNICAL SKILLS, EXPERTISE NECESSARY FOR INTERNSHIP PROJECT, IF YOU KNOW:

_____

_____

ANTICIPATED INTERN SALARY FOR 6 WEEK, 40 HR. PER WEEK PROJECT:

_____

WOULD YOU LIKE ASSISTANCE IN IDENTIFYING INTERNSHIP PROJECT? _____ _____
yes no

ARE YOU INTERESTED IN EARNING UNDERGRADUATE OR GRADUATE CREDIT FOR YOUR PARTICIPATION?: _____ _____
yes no

WHAT MOTIVATED YOU/ YOUR BUSINESS TO PARTICIPATE? _____

_____

_____

_____

PLEASE RETURN FORM TO :

Vermont
SCHOOL TO WORK

The Vermont Employer/Teacher Internship Program

EDUCATOR APPLICATION FORM

NAME _____ DATE_____

ADDRESS _____ HOME PHONE _____
_____ SCHOOL PHONE _____
(ZIP)
E-MAIL _____ SOC. SEC.# _____

SCHOOL NAME _____
ADDRESS _____

SUPERVISOR or PRINCIPAL _____

UNDERGRADUATE DEGREE(S) _____

MAJOR _____ INSTITUTION _____ _____
(YEAR)
FIELD(S) OF CERTIFICATION _____

GRADUATE CREDITS or DEGREE(S) _____

MAJOR_____ INSTITUTION_____
(YEAR)

CURRENT POSITION & YEARS _____
PREVIOUS POSITION(S) & YEARS _____

CURRICULUM DEVELOPMENT EXPERIENCE _____
_____

PUBLICATIONS/PRESENTATIONS _____

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS _____
_____
AWARDS _____
_____
OTHER QUALIFICATIONS? _____

WHAT MOTIVATED YOU TO APPLY?_____

_____

_____

AREA(S) OF INTEREST FOR INTERNSHIP PLACEMENT (e.g. Human Resources, Marketing, Production, Engineering, Labs, etc.) _____

_____

_____

TECHNICAL SKILLS & LAB EXPERIENCE_____

_____

COMPUTER EXPERIENCE_____

_____

OTHER WORK EXPERIENCE (Include extracurricular activities & personal interests) _____

_____

_____

REGIONAL WORKSITES THAT WOULD APPEAL TO YOU _____

_____

PLEASE RETURN APPLICATION TO :

The Vermont Employer/Teacher Internship Program

EDUCATOR RECOMMENDATION FORM

The Vermont Employer/Teacher Internship Program is a six-week-long summer program that places an educator in a business to do meaningful project work, followed by a year-long commitment of the educator, the school and employer. The VETIP goals are to improve student learning and to build business/school partnerships. In this way it supports the learning goals established in Vermont's Framework of Standards & Learning Opportunities. Teachers support these goals by acquiring motivation and knowledge useful to their teaching. Employers support them by gaining greater understanding of teaching through the internship experience.

Please complete this form and return to:

Applicant's Name _____ School _____

	EXCEPTIONAL	SATISFACTORY	UNSATISFACTORY	UNKNOWN
Scholarship				
Language Usage (oral & written)				
Leadership				
Cooperativeness				
Personality				
Probable success as an intern				
Probable success as curriculum developer				

Comments: _____

Professional relationship to applicant _____

Qualifications of applicant to fulfill the goals of VETIP _____

Name _____ Signature _____ (Date)

Address _____ Position _____

Phone _____

Vermont
SCHOOL TO WORK

The Vermont Employer/Teacher Internship Program

Revised Next Steps - for STW Coordinators/Volunteers

Matching Educator Applications with Employer Interest

Response to Educator Applications: MARCH

Mail a response letter from your regional partnership to include:

1) thanking and acknowledging receipt of application;

2) reminding educators that based upon their applications and skills, employers may or may not phone for interviews;

3) asking them to prepare a resume & list of interests and skills or professional portfolio for job interview;

4) ask them to inform you if they are intending to enroll at UVM for 3 graduate credits;

5) to expect word from employer or STW partner by end of May.

VERMONT STATE MATHEMATICS COALITION
MATHEMATICS • SCIENCE • TECHNOLOGY

VISMT
VERMONT INSTITUTE FOR SCIENCE, MATH & TECHNOLOGY

Response to Interested Employers: MARCH

Mail (and phone - for personal touch) each contact to include:

1) thanking and confirming their financial commitment of the dollar amount completed on the form;

2) ask them to inform you if they are interested in enrolling at UVM for 3 graduate or undergraduate credits;

3)reminding them that they will be receiving names, addresses and and copies of educator application forms no later than April 28;

4) remind them that they are to schedule interviews with the educators before May 16;

5) ask that they inform educators by mail that they have been selected - or not - no later than May 16;

6) ask that they enclose pertinent background materials on the business with confirmation letter in preparation for the June orientation session;

7) mail the names of their selections to you, the STW regional coordinator.

Administration By APRIL 28

1.) Compile a mailing list of employers & educators who wish to enroll at UVM for graduate credit. Mail to Nancy Cathcart.

Match-making Educators with Employers: APRIL

1.) Gather a team (from your Professional Development Committee?) to review Educator Applications and Employer Interest Forms and to make matches for employer interviews.

2.) Mail appropriate matches to employers no later than April 28, with reminders to finish interviews and announcements by May 16.

Supporting Internship Matches **MAY' 97 - MAY '98**

1.) Mail congratulatory letters to all three partners from each internship after selections have been made (educator, employer and school administrator) to include:
   a.) letter of agreement for each to sign and return to you prior to orientation;
   b.) UVM application for college credit and course syllabus,
   c.) include orientation agenda and direction maps. **May**

2.) Attend the VETIP orientation training in your region, **June**

3.) Plan one visit to each of your internship placement , **July- August.** (Nancy to accompany you if intern or employer is enrolled in UVM)

4.) Prompt the intern partners in your region to remind you of their faculty/business organization presentation schedules so that you and your invited media contacts can attend, **Sept. - Nov.**
   - present certificates to "Ambassadors of Change" - photo op.

LOGO

SAMPLE RESPONSE LETTER FOR EMPLOYER APPLICANTS

Date

Name
Business
Address

Dear First Name:

Thank you for your interest in employing an educator through the Vermont Employer/Teacher Internship Program for 1997-1998. I have received your completed interest form and confirm your offer to pay $_____.

In the next few weeks, our STW partnership will review the applications and submit appropriate ones to you. We ask that you:

schedule interviews with the ones you deem qualified for the project(s) you have in mind, between April 11 and May 2;

select and inform the hired applicant(s) no later than May 9
and in the acceptance letter, please enclose pertinent materials about your business in preparation for orientation;

inform those whom you interviewed who were not selected by May 9;

return report of whom you hired, interviewed and did not interview to me.

We have asked the educators to prepare resumes, lists of skills and/or professional portfolios for their interview so that you can make a well-informed decision.

Please phone me if you are intending to enroll in the University of Vermont for undergraduate graduate credit for this experience. I will mail you the enrollment materials and course syllabus.

Best wishes. And thank you for your dedication to Vermont's children and our future workforce.

Sincerely,

Regional STW Coordinator

Regional Partnership Address *Phone #*

LOGO

SAMPLE RESPONSE LETTER FOR EDUCATOR APPLICANTS

Date

Name
School
Address

Dear First Name:

Thank you for applying for the Vermont Employer/Teacher Internship Program for 1997-1998. I have received your completed application and two recommendation forms.

In the next few weeks, our STW partnership will review the applications and submit them to appropriate interested employers. If you are chosen for an interview, the employer(s) will contact you directly by the end of April. If you are not selected for interviews you will hear from us or the employer by the end of April.

In the meantime, it would be a good idea for you to develop your resume and list of skills or professional portfolio in anticipation of the job interview. Employers involved in this program in the past have been delighted with the professional portfolios - and have, in some cases, instituted them in their own hiring practices.

Please phone me if you are intending to enroll in the University of Vermont for graduate credit for this experience. If you are hired, I will mail you the enrollment materials and course syllabus.

Best wishes. And thank you for your dedication to Vermont's children.

Sincerely,

Regional STW Coordinator

Regional Partnership Address *Phone #*

Vermont
SCHOOL TO WORK

The Vermont Employer/Teacher Internship Program
Letter of Agreement

In accepting a Vermont Employer/Teacher Internship Program placement, we, _____, _____,
(Print educator name) (Print employer name)
agree to:

- Support a six-week internship experience followed by a year-long commitment to further develop the partnership as outlined by VETIP;
- Attend VETIP orientation & post-internship forums;
- Present outcomes of the 6 week experience to faculty and the business community;
- Co-develop a workplan, a teacher portfolio and a product or project completed during the internship as described in the VETIP notebook;
- Complete a Pre- and Post-Evaluation Survey;
- Co-present the finished product and portfolio to school administrator(s), Spring '98.

The employer will pay the teacher _____.
(Payment schedule & dates from workplan)
If the internship is being partially paid or fully funded by your regional School-to-Work partnership, the partnership will pay the teacher_____.
(Payment schedule & dates from workplan)

Have fun learning from each other while partnering to help students be prepared for the world of work.

_____ _____
(Signature of Educator) (Date) (Signature of Employer Supervisor) (Date)

Approved by: If being paid in part or full by STW:

_____ _____
(Signature of School Administrator) (Date) (Signature of regional STW coordinator) (Date)

TOP TEN REASONS TO PARTNER TEACHERS WITH EMPLOYERS

Vermont Employer/Teacher Internship Program

10. EMPLOYERS GAIN PROFESSIONAL, TEMPORARY STAFF TO ACCOMPLISH AN IMPORTANT JOB.

9. THE "CROSS-CULTURAL EXCHANGE" INCREASES COMMUNICATION AND UNDERSTANDING AMONG EMPLOYERS, TEACHERS AND OTHER COMMUNITY PARTNERS.

8. TEACHERS EXPERIENCE FIRST-HAND THE IMPORTANCE OF GETTING TO WORK ON TIME, DRESSING APPROPRIATELY, TEAM-WORK, DEPENDABILITY, AND A POSITIVE "CAN DO" ATTITUDE.

7. TEACHERS SEE NEW WAYS TO APPLY TECHNOLOGY IN THE CLASSROOM.

6. EMPLOYERS GAIN NEW INSIGHTS INTO STUDENTS AND TEACHERS IN SCHOOL.

5. TEACHERS CAN DEMONSTRATE FOR STUDENTS THE RELEVANCE OF WHAT THEY LEARN IN THE CLASSROOM AS IT RELATES TO WHAT THEY NEED TO KNOW AND BE ABLE TO DO IN FUTURE WORK, EDUCATION AND TRAINING.

4. SCHOOLS AND BUSINESSES DEVELOP HONEST, MUTUALLY-ENRICHING, SUSTAINING RELATIONSHIPS.

3. EMPLOYERS GAIN ACCESS AND CONTRIBUTE TO THE DEVELOPMENT OF A TALENTED LABOR POOL, REDUCING THE COSTS OF RECRUITING, SELECTING AND TRAINING NEW WORKERS.

2. SCHOOLS GAIN INCREASED COMMUNITY SUPPORT.

1. STUDENTS ARE PREPARED FOR HIGH-SKILL, HIGH-WAGE CAREERS AND FULL AND PRODUCTIVE LIVES.

The Vermont Employer/Teacher Internship Program

Internship Workplan

EDUCATOR: _____ **SCHOOL & TOWN:** _____ **FIELD:** _____

EMPLOYER SUPERVISOR: _____ **EMPLOYER:** _____ **TOWN:** _____

INTERNSHIP/DEPT.: _____ **DATES OF INTERNSHIP:** ***(start)*** _____ ***(end)*** _____

WORK SCHEDULE: ***(Days)*** _____ ***(Time)*** _____ ***(Hrs. per week)*** _____

SALARY & PAY SCHEDULE: _____ **PAYMENT PROVIDED BY STW:** _____

EMPLOYER/TEACHER SCHEDULED PROGRESS REVIEWS: ***(Dates)*** _____ ***(Times)*** _____
(e.g. 1 hr. per week, 8:30 AM)

PHASE I - 6 WEEK INTERNSHIP
JOB DESCRIPTION OF INTERN:

GOALS:	**ACTIVITIES:**	**TIMELINE:**

PHASE II - SCHOOL YEAR ACTIVITIES - Anticipated connections for change in the classroom

ROLES OF TEACHERS & EMPLOYERS:	PLANNED ACTIVITIES:	TIMELINE:

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SAMPLE

The Vermont Employer/Teacher Internship Program

Internship Workplan

EDUCATOR: _Sarah Dominque_____ **SCHOOL & TOWN:** _____ **FIELD:** _____

EMPLOYER: _TDS Telecom_____ **EMPLOYER SUPERVISOR:** _Ritva Carlson_____ **TOWN:** _____

INTERNSHIP/DEPT.: _____ **DATES OF INTERNSHIP:** ***(start)*** _1/1/96_____ ***(end)*** __12/9/96_____

WORK SCHEDULE: ***(Days)*** _Mon. - Fri._____ ***(Time)*** _8:00 - 5:00_____ ***(Hrs. per week)*** ___40_____

SALARY & PAY SCHEDULE: __$400 per week_____ **PAYMENT PROVIDED BY STW:** _____

EMPLOYER/TEACHER SCHEDULED PROGRESS REVIEWS: ***(Dates)*** _____ ***(Times)***_____
(e.g. 1 hr. per week, 8:30 AM)

JOB DESCRIPTION OF INTERN:

- To develop grade appropriate educational kits, k-12, for TDS Telecom managers to use when giving presentations in schools. Kits to include: lessons, follow-up activities, materials needed, and teaching tips.
- To research Advantage III Program, and prepare a document for employees who demonstrate an interest in the program.

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GOALS	ACTIVITIES	HOURS/DAYS OF WEEK
1.) Gain exposure to company policies regarding dress code, code of conduct and confidentiality requirements.	Basic Windows/Word/cc Mail/ LAN training Department orientation Networking for information, key contacts and materials	Week 1 - Mon. - Fri. Week 1 Week 1 - 2
2.) [illegible]	[illegible]	Week 2 - 4

SAMPLE

GOALS	ACTIVITIES	HOURS/DAYS OF WEEK
3.) Gain experience in a business setting which will be useful to take back to the classroom to integrate into teaching.	Miscellaneous office experiences - making phone calls, use of cc mail	Week 1 - 6
	Daily interactions and collaboration with co-workers	Week 1 - 6
	Following company policies and procedures	Week 1 - 6
4.) Gain experience in developing curriculum for use by a business in a school setting.	Write presentation tips	Week 2
	Write guidelines for school contact	Week 2
	Work with Creative Services to design materials for kits	Week 3
5.) Demonstrate an awareness of and knowledge about the increased use of telephone and computer technology.	Shadow a lineman for research purposes	Week 3
	Development of Kits: A Day in the life of Lineman, Cable Technology, So What Do You Want To Do With Your Life?	Week 3
	Finalize and publish all kits	Week 3 - 6
	Advantage III - Prepare a document describing: - a sample case study; - how to access potential candidates; - how to interview candidates; - how to choose interns; - tips for working with and supervising interns	Week 4 - 6

STW logo and regional STW address

DRAFT LETTER for VETIP ORIENTATION
EDUCATOR VERSION

Dear (Name of Educator):

Congratulations! We are delighted that you are participating in the Vermont Employer/Teacher Internship Program for 1997-1998. *(You could insert information about the placement here if you have not already done so.)* We expect that your experience over the next year will be deeply rewarding for you. We also know from past participants, that you are likely to learn a great deal more than you expect, while contributing to meaningful instructional change that positively impacts our children.

To make the most of your experience we invite you to attend the VETIP Orientation Program scheduled for *(day, time, place)*. These few hours are designed to help you make an easy transition into your employer's worksite, give some examples of what to expect, and help you co-create a meaningful workplan with your employer supervisor. We also ask that you bring a recent copy of your Individualized Professional Development Plan (IPDP) if you have one.

We have designed the orientation to be relevant to the needs of both educators and employers based on past year reviews. We sincerely hope that you will make your best effort to be there.

Attached is a map and the proposed agenda. Please RSVP to me by *(date, one week in advance of orientation)*.

Thank you for your willingness to be such an important part of the Vermont Employer/Teacher Internship Program.

Sincerely,

Your name

STW logo and regional STW address

DRAFT LETTER for VETIP ORIENTATION
EMPLOYER VERSION

Dear (Name of Employer):

Congratulations! We are delighted that you are participating in the Vermont Employer/Teacher Internship Program for 1997-1998. *(You could insert information about the teacher and position here if you have not already done so.)* We expect that your experience over the next year will be deeply rewarding for you. We also know from past participants, that you are likely to gain a great deal more than you expect, while contributing to meaningful instructional change that positively impacts our children.

To make the most of your experience we invite you to attend the VETIP Orientation Program scheduled for *(day, time, place)*. These few hours are designed to help you create an easy transition for your intern, give some concrete examples of what works ad what does not from folks who have done it before, and help you co-create a meaningful workplan with your intern.

We have designed the orientation to be relevant to the needs of both educators and employers based on past year reviews. We sincerely hope that you will make your best effort to be there.

Attached is a map and the proposed agenda. Please RSVP to me by *(date, one week in advance of orientation)*.

Thank you for your willingness to be such an important part of the Vermont Employer/Teacher Internship Program.

Sincerely,

Your name

STW logo and regional STW address

DRAFT LETTER for VETIP ORIENTATION
SCHOOL ADMINISTRATOR VERSION

Dear *(Name of School Administrator)*:

Congratulations! We are delighted that *(name of educator, school)* are participating in the Vermont Employer/Teacher Internship Program for 1997-1998. *(You could insert information about the placement here if you have not already done so.)* We expect that his/her experience over the next year will be deeply rewarding for him/her and for the students. We also know from past participants, that he/she is likely to gain a great deal more than expected, while contributing to meaningful instructional change that positively impacts our children.

To make the most of the experience we invite you and *(name of educator)* to attend the VETIP Orientation Program scheduled for *(day, time, place)*. These few hours are designed to help you learn more about VETIP, to allow the educator intern and the employer to learn ways to make the transition meaningful, give some concrete examples of what works and what does not, and to create a meaningful workplan.

We have designed the orientation to be relevant to the needs of both educators and employers based on past year reviews. We sincerely hope that you will make your best effort to be there.

Attached is a map and the proposed agenda. Please RSVP to me by *(date, one week in advance of orientation)*.

Thank you for your willingness to be such an important part of the Vermont Employer/Teacher Internship Program.

Sincerely,

Your name

Innovation and Imagination: Advancing the Virtual Classroom in Rural New England

Presenters: Yvonne Damborg
Kathy Flynn
Rick Nastri

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Background

There's an old saying in New England that "you can't get there from here". Well, just go down to an ATM-connected school in Maine and plug in to this exciting, new electronic resource or visit the "virtual campus" out in Nantucket's Community School or Martha's Vineyard Regional High School. We'll show you the way several school-to-work systems in rural communities in the Northeast are advancing distance learning with novel solutions to meet local needs.

Effective school-to-work systems must seek to encompass all regions of a state and serve all students—providing equal access and quality connections to all components of the system can be challenging for many non-urban areas. The rural nature of many communities in Maine, Massachusetts and other northeastern states—island communities as well as areas separated by mountain range, vast wilderness, or merely no transportation—support few large businesses or even minimal concentrations of business of any size. Postsecondary campuses are rare, and where they are accessible, course options may be limited.

Prior to the widespread use of electronic communication for teaching and learning, distance education, or "correspondence" education was delivered via the postal service. By the early 1920's, educational radio stations were operating and by 1950, television began broadcasting educational programs. But it was not until earlier in this decade that the demand for quality distance education skyrocketed, most directly in response to an increased demand for alternative means to access higher education. Today, the prevalence of computer networking, the world wide web, and new multimedia technology is transforming the access to K-12 and postsecondary teaching and life-long learning.

The following model projects are pioneering this new spectrum of technology in preparing learners, teachers and businesses for the future without regard to geographic location or community access to essential resources. Building career pathways with enriched school-based learning opportunities and increasing a community's access to higher education, at minimal administrative and facility costs, is taking traditional distance learning the next step along the information superhighway. Adding in interactive, 'real-time' business CEO's, engineers, scientists, health care specialists and others in off-site business ventures and sponsored projects propel these rural community's connections to compete successfully in the global community.

Advanced Telecommunications for Maine

Maine schools are the gateway for an emerging technology with the vision and promise to deliver advanced telecommunications access today and to the next generation.

Asynchronous Transfer Mode (ATM) is moving information faster and farther and opening endless possibilities for sharing and saving resources. It is a complex name for an extraordinary flexible, adaptable, reliable and efficient way to transport video, data, and voice that will enhance course delivery and staff development for all of Maine's schools. It offers the clearest concept and application to date for overcoming geographic, economic and social barriers, for connecting rural and urban communities, and for promoting collaboration between public and private sectors and resources.

A Closer Look at ATM

The advanced interactive fiber-based ATM technology provides the wide bandwidth capacity to carry real-time video, data, and voice communications over the telephone networks with ample room for growth and the flexibility to adapt to standards and technologies yet to be developed. ATM is the cornerstone of Maine's advanced telecommunications infrastructure that will link high schools and vocational centers, libraries and government service agencies in all regions to phenomenal opportunities for distance learning. Access to and sharing of constantly changing information and resources will be available from urban centers to rural and island communities.

To demonstrate broadband capacity for sending and receiving huge amounts of information, consider: a 33-volume encyclopedia being transmitted in fewer than five seconds through ATM switching, a technology still in its infancy. Picture simultaneous video transmission in two directions, without the use of satellites.

The ATM infrastructure offers innovation possibilities for Maine's 170 high schools and applied technology centers to connect the technology that will drive educational reform in the next century.

Just imagine:

- Advanced placement and foreign language courses being taught to as few as two students in a rural school who join urban classmates and a highly trained and certified teacher through distance learning.
- Teachers and other staff participating in professional development workshops and courses from their home school through teleconferencing.

- Students in the most remote area of the state using video cameras and microphones to ask questions of nationally recognized professors appearing live on TV monitors in the classroom..

- Teachers working together and co-teaching classes to students from different parts of the state.

And in the near future:

- Students in distant high schools taking "electronic field trips" to study wildlife in Africa or to visit the latest exhibits at the Smithsonian Museum, accompanied by experts, and without ever leaving the classroom.

Budget

Money from a $15,000,000 bond issue will pay for the switching and routing equipment and classroom equipment for all of Maine's 170 school sites.

Project Goals

The bottom line of the state's telecommunications initiative is to provide comparable educational opportunity at comparable costs for every Maine community.

For more information about the ATM network and the bond issue projects to expand telecommunications capabilities and student learning opportunities in Maine Schools, contact:

Linda Lord, Distance Learning Education Coordinator
Maine Department of Education
64 State House Station
Augusta, ME 04333
(207) 287-5620
linda.lord@state.me.us

Improving Teaching & Learning Through Cape Cod's Virtual Campus

In the spring of 1997, the Massachusetts Board of Education designated nearly $300,000 to Cape Cod Community College to implement a virtual campus linking seven public education institutions in a region with major geographic barriers. The model increases access to undergraduate courses, placing "campuses" on the two islands of Martha's Vineyard and Nantucket, and the rural communities on the outer Cape.

The consortium includes Cape Cod Community College, and Provincetown, Nauset Regional, Martha's Vineyard Regional, Nantucket, Mashpee, and Sandwich High Schools. It also involves local business. Infinium Software, Inc., a Cape-based global company recently ranked 20th by Business Week in the 1997 Hot Growth List, will enrich classroom learning by providing live linkages by their employees to classrooms at all sites.

The project promotes collaboration and links low demand programs on campus to high demand at the feeder high schools through distance learning. It strengthens curriculum and instruction in developing a 2+2 model for the emerging environmental sciences career pathway. It enhances faculty productivity through professional development and promotes regional training. It improves student preparedness for college by encouraging greater discussion between high school and community college faculty. By serving students in areas with geographic barriers, it increases college enrollment and creates a virtual campus at low cost. Individual students enroll locally by taking classes via an interactive videoconferenceing system using ISDN telephone lines. During 1998, twelve courses will be piloted through the consortium.

Steps to Establish the Project

A Project Advisory Board will oversee the planning and implementation of the project goals for FY '98.

Timeframe	Activity	Responsibility Center
October, November, December 1997	1. Purchase & install equipment	CCCC Steve LeClair
	2. Calendar ongoing advisory and curriculum development meetings	CCCC Dean Bell & STC Partnership
	3. Review current course offerings, begin curriculum design	CCCC Dean Bell with full Advisory Group
	4. Establish criteria for data collection and evaluation	CCCC Dean Bell with full Advisory Group
January, February, March 1998	5. Train Faculty on using technology	CCCC Steve LeClair
	6. Begin course delivery	CCCC Dean & Steve w/Advisory
	7. Outreach to distant communities	CCCC Dean Bell w/ Advisory
	8. Recruit businesses to video links	STC Partnership with Infinium Software, Inc.
April, May, June 1998	9. Schedule Summer/Fall '98 Courses	CCCC Steve Leclair w/Advisory
	10. Create plan sharing courses across secondary school sites	STC Partnership w/ Advisory

Budget

$298,919 was awarded by the Massachusetts Board of Education in the spring of 1997 to implement the "virtual campuses". Demonstrating a broad commitment to this initiative, local partners through the Cape Cod, Martha's Vineyard and Nantucket School-to-Careers Partnership have committed $256,810 as in-kind and cash matches.

Results

The project results in increased college course options for students with improved access to underserved communities and increased enrollment, while minimizing faculty and facility costs. Individual institutional resources are leveraged for creative, cost effective academic and technical instructional delivery. It enhances the College's capability to serve the region by:

- increasing access in distant communities to certificate and associate degree college courses;
- expanding offerings in academic and technical areas while keeping faculty costs stable;

- providing access for high school students to Advanced Placement and college level courses;
- furthering school-to-work goals by increasing academic excellence for students, connecting the workplace to the classroom; and
- pooling resources at each site, expanding college preparation for secondary level students.

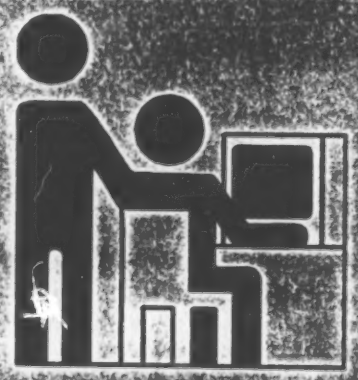
Contact Persons:

Rick Nastri, Dean of Social Sciences, Health and Human Services
Cape Cod Community College
West Barnstable, MA 02668
(508) 362-2131 ext. 4380

Kathy Flynn, Director of Partnership Development
Massachusetts Office for School to Work Transition
Department of Education
350 Main Street, 5th Floor
Malden, MA 02140
(781) 388-3300 ext. 335 kflynn@doe.mass.edu

Yvonne Damborg, Director
Maine Council on Vocational Education
160 Capitol Street
Augusta, ME 04330
(207) 622-4709

New York Wired: Connecting Schools



Presenters: Jeffrey Perlee
New York Wired Staff

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The New York State Division of the Lottery has provided a brochure entitled

A Little Education about New York Wired

The brochure is located in the front pocket of the Manual.

Contact Person:

Jeffrey Perlee, Director
NYS Division of the Lottery
One Broadway Center
PO Box 7500
Schenectady, NY 12301-7500
(518) 388-3300

A little education about New York Wired

NEW YORK LOTTERY

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What is New York Wired?

New York Wired is a program dedicated to wiring schools and libraries across the state for Internet access and to prepare New York's schoolchildren with the technological tools and skills they will need to compete in the 21st century. New York Wired has evolved into several unique programs, each designed to benefit schoolchildren throughout the state. Listed below is information about each program.

For more information, visit our Web site at
www.nywired.org

What is New York Wired Scholars?

New York Wired Scholars is a unique program developed by the New York Lottery in conjunction with the University at Albany and the State Office of Parks, Recreation and Historic Preservation. The goal of the program is to bring the diverse assets and attractions of the State of New York into the classrooms of New York schoolchildren through the magic of television. Ten accomplished high school sophomores will participate in a year-long "field trip" exploring every corner of New York State as a living classroom. And their discoveries will be filmed by a video crew. One month may find our scholars in Ticonderoga experiencing colonial history. Another month might find them on Long Island Sound exploring marine ecosystems, or on Wall Street absorbing the energy of the financial markets. These segments will be aired on a monthly television show to be broadcast statewide on PBS and may be used as part of the history curriculum for 7th and 8th graders across New York State.

1997-1998 New York Wired Scholars Living Classroom Locations

August	Capital Region
September	Long Island
October	Central New York & Finger Lakes
November	Niagara Falls
February	New York City
March	Lake Placid & Adirondacks
April	Hudson Valley

What is the Internet Wiring program?

In 1996, the New York Lottery, together with a unique coalition of business and government, sponsored the New York Wired for Education Internet program. This program provided schools all across the state with the necessary materials and volunteers to install equipment for Internet access. All told, in one historic day, over 3,000 schools and libraries across the state were wired for access to the Internet. Governor Pataki volunteered and donned a hard hat and work clothes to help wire his old elementary school in Peekskill, New York. The volunteer work force and the donated and discounted hardwiring and equipment enabled thousands of schools and libraries to be wired at a cost savings of over $20 million. Thanks to corporate sponsors, such as IBM, NYNEX, Ni-Mo, AT&T and the New York Lottery, New York Wired for Education '96 was a huge success. New York Wired for Education continues to wire additional schools and libraries across the state for access to the Internet. This year, the Lottery launched a sponsorship promotion which allowed local Lottery agents to sponsor a school or library in their neighborhood. The Lottery agent's sponsorship was matched, dollar for dollar, by the Lottery, enabling the local school or library to purchase a discounted hardwiring kit from New York Wired for Education. Two thousand five hundred (2,500) Lottery agents participated in this sponsorship opportunity, resulting in thousands of additional schools being wired for access to the Internet. Discounted hardwiring kits continue to be available from New York Wired for Education for any school or library in the state that wishes to participate in the program.

What is NY Wired TV?

NY Wired TV is the New York Lottery's new half-hour weekly television show that's scheduled for launch in every television market in New York State on October 4, 1997. Sponsored by the Lottery, NY Wired TV gives Lottery agents a chance to win computer prizes for schools in their hometown communities and cash prizes for players of the "NY Wired" instant scratch ticket. On sale since mid-August, the NY Wired Instant Cash Game features a top instant cash prize of $50,000 and is one of the Lottery's highest prized Instant Cash Games. Even if you are not an instant cash winner, NY Wired game tickets give you the chance to be selected as a member of the studio audience on the NY Wired TV show, and to share in the prize money given away on the show. NY Wired TV is a show where everyone wins: New York schools, Lottery agents, Lottery players and everyone in the State of New York.

For more information about New York Wired, check out our Web site at www.nywired.org.

NY Wired Television Station Lineup

MARKET	STATION
New York	WNBC - Sat. 7:00pm
Albany	WRGB - Sat. 7:00pm
Syracuse	WIXT - Sat. 7:30pm
Rochester	WHEC - Sat. 7:00pm
Buffalo	WUTV - Sat. 7:00pm
Binghamton	WMGC - Sat. 11:00pm
Utica	WPNY - Sat. 7:00pm
Watertown	WWTI - Sat. 11:00pm (show will air 6:00pm to 8:00pm after football season)
Elmira	WENY - Sat. 7:30pm

©1997 New York Lottery. You must be 18 or older to play Lottery games

School-to-Work Risk Management

Presenters: Greg Voorheis
Gregg Meyer
June Van Houten

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Background

With the passage of the federal School-to-Work Opportunities Act of 1994, educators, private and public sector employers, organized labor and a host of other entities have been asked to become partners in the educational process of youth. Through this legislation, the traditional distinction between the school and the world of work is gradually coming to an end. In order to better prepare students for the high skill, high wage jobs of a globally competitive economy, new strategies are developing to expand and enhance the learning opportunities that students have available to them.

The Act requires that state and local consortia form to implement the school-to-work initiative. This involves a host of individuals from a variety of entities working together and bridging the gap between school and work. A fundamental component of the school-to-work initiative is the provision that all students are provided with an opportunity for work-based learning. This requirement means that students, schools and employers become part of an integrated learning process which brings the parties together in rather unique and unfamiliar roles. The workplace becomes an extension of the classroom. Employer mentors and teachers collaborate on the best approaches to teach abstract academic subject matter. Success in the classroom now becomes a function of an external activity, developmentally appropriate, related to a career and/or an educational goal.

These new strategies are moving along with and ahead of other factors, i.e., child labor laws, liability laws and issues, and risk management, to name a few, that directly impact on the implementation and operations of the new school-to-work initiative. School-to-work initiative implementors have had varying experiences. Many states have formed STW Risk Management Committees. Vermont formed its committee about two years ago and has published a STW Risk Management Guide which has been widely disseminated throughout the state. Over the past two years, multiple training sessions have been provided for educators, parents, school-to-work administrators, employers, and others. More are planned. Currently, the state is preparing a Work-Based Learning Manual (a "How To" guide) and one of its chapters will be on the legal issues involved with school-to-work risk management. One resource guide is nearing completion in Chittenden County, Vermont's most populated county, and it, too, will have a section dedicated to risk management. Other regional resource guides are planned.

Recently, the National School-to-Work Office asked Vermont to convene a national workgroup on risk management. The group was asked to: 1) identify what states need; 2) ascertain what is and is not working; and 3) delineate suggested next steps regarding this issue. The result of the workgroup's May, 1997 meeting was a paper that was presented in Chicago to the nation's state school-to-work

directors. Reaction from the National STW Office has been very positive and supportive. Already, one technical assistance guide has been published which deals with employer liability issues. Under production now is a second national technical assistance guide that will address insurance issues, trainee-employee definitions and other legal topics related to STW. Several states will be profiled detailing how they have handled STW risk management.paper and Vermont's STW Risk Management Guide.

STW Risk Management

Risk management issues impact on all of the participants of school-to-work, especially students and their parents, employers and schools. It is imperative that school-to-work stakeholders understand the financial and legal exposures they are subject to when placing students off campus as part of their academic program. With the appropriate information, training, supervision, protocols, checklists, tools and insurance products, risks can be minimized and effective teaching/learning strategies can take place. The National School-to-Work Office, states, and local STW partnerships have both the responsibility and the opportunity to ensure that school-to-work activities occur in safe environments.

Identification of Major Issues

The major goals of STW risk management are: to protect the health and welfare of a student who is participating in school-to-work (STW) activities; to provide equal access to STW activities for students in both rural and urban areas by encouraging all employers (large and small) to participate in work-based learning opportunities; to preserve the learning opportunities for students in off-site educational environments; and to help school districts manage their exposure to risks. Several key questions are: What is in place to recover the cost of health care that may be required as well as to protect the future earnings potential of the youth? Who is responsible for these costs: the employer, the parent or the school? What conditions or circumstances shape the differentiation of responsibilities among the involved groups? What different coverages are needed for the variety of STW activities? What is mandated by state/federal law? Is state/federal legislation needed? Is a new insurance product needed? What are the other areas of risk management, other than insurance, that states need to attend to?

The following are the major types of insurance that help reduce exposure to financial liability:

(1) **General Liability Insurance:**
Liability is not accident or medical insurance. Its purpose is to protect the insured against claims of negligence. Negligence exists when a duty is owed to another and a

non-intentional breach of that duty occurs resulting in some form of physical injury and/or property damage.

(2) **Basic Voluntary Student Accident Insurance:**
Accident insurance offered to students but generally not required. For certain activities such as school sports, student accident insurance may be required and not voluntary. Most traditional accident insurance programs require the student to be on the school site or under the direct supervision of a school employee for the student to be covered unless other provisions are made within the actual policy.

(3) **Student Accident Catastrophic Insurance:**
Serves as a potential stop-loss for a school in case of a major injury. Most basic voluntary student accident insurance programs provide maximum benefits up to $25,000; some programs include $50,000 or $100,000 benefit maximums. Catastrophic insurance has much higher maximum benefits such as $1,000,000 or $5,000,000 along with a substantial deductible amount that assumes the existence of a basic accident insurance policy or a process for self-insurance.

(4) **Workers' Compensation:**
Insurance that compensates an individual's lost wages (a percentage) due to injury suffered while on the job and covers medical costs and the loss of functional capacity. Individuals who are engaged in a paid employee-employer relationship must be covered.

(5) **Automotive Liability Insurance:**
Insurance that covers the liability of the school and the vehicle's driver as well as damage to the vehicle. In general, a differentiation of coverage exists when one is using a school-owned vehicle vs. a privately owned vehicle. Depending on the size of the vehicle, special licenses may be required.

Also included are two charts that were developed by Vermont's STW Risk Management Committee as part of its widely-disseminated "STW Risk Management Guide" (see

Attachment A and B). The guide is being used by STW coordinators, educators and employers throughout Vermont.

There are, however, several areas that need closer scrutiny and in some cases, federal action. The following is an identification of these issues. They come from a paper on STW Risk Management that was prepared by a national STW Risk Management Workgroup formed under the sponsorship of the National School-to-Work Office and convened by the State of Vermont in May, 1997.

Delineating the Employment Relationship: First, there is a lack of a clear understanding of the conditions under the Fair Labor Standards Act which allow for non-paid work with an employer. Second, there is a fine line between a youth's being productive and nonproductive at a job site and STW practitioners have not been provided with useable guidelines on how to implement this type of work-based learning activity. Specifically, when does a trainee become an employee? Third, there needs to be a rational process designed to determine this transition and it should take into consideration the different lengths of training required for various occupations and students' abilities and needs. Without these guidelines, employers run the risk of not being in compliance with the law.

Non-paid Work-Based Learning: A major concern is how to apply child labor laws and liability coverage to the various kinds of non-paid, work-based learning/community service activities. Questions that arise are: How are the various types of work-based learning activities defined? What types of insurance provides the best coverage for the specific kind of activity? Where does the responsibility for the activity reside and who should pay (schools, employers, parents)? The answers are not easily determined (refer to Attachments).

Definitions and National Technical Assistance Guide: There are many types of work-based/ community service learning activities for the multiple age groups STW affects. Some are non-paid and others are paid. These activities range from industry tours to actual registered apprenticeships. Work-based learning also includes teacher-employer internships and site visits for teachers and other school officials. A national taxonomy of work-based learning activities, with definitions, which lists risk factors and responsible entities is not available. The STW "Glossary of Terms" is a start but this needs to be expanded. Some states have established their own taxonomies and sets of definitions. Others have even had legislation enacted, or proposed, that helps clarify these issues. And more and more states are forming Risk Management Committees that address a wide range of issues. The workgroup believes that schools are the focal point for school-to-work, and because of this, a recommended protocol of behaviors, possible solutions and necessary steps should be provided through a national risk management technical

assistance guide. This would be structured to address each kind of work-based learning activity with a goal of reducing risk factors for schools as well as employers and students. **NOTE**: Since the publication of the national workgroup's paper, the National School-to-Work Office has published one guide on Employer Liability and is preparing a second guide on insurance and labor law issues.

Workers' Compensation and Paid Work-Based Learning: A few states have implemented or are in the process of implementing risk management strategies for expanding paid work-based learning opportunities. Some of these strategies include: (1) establishing a nonprofit corporation which would be the employer of record for STW students or naming schools as the employer of record; (2) purchasing a statewide health and accident insurance coverage for STW students (both basic and catastrophic); and (3) ensuring workers' compensation coverage for STW students involved in paid work-based learning activities. Little, if any, information is available about why states have chosen various strategies and little is known about their experiences to date. At this time, however, the national workgroup is aware of no evidence that suggests the presence of students in the workplace has any measurable negative impact on workers' compensation rates. This may or may not change when the school-to-work initiative goes full scale.

Student Health and Safety on the Job: Health and safety information and procedures for students in work-based learning are essential to preventing injuries and any subsequent law suits. The School-to-Work Opportunities Act requires per Section 601(4) "that students participating in STW programs shall be provided with adequate and safe equipment and safe and healthful workplaces in conformity with all health and safety requirements of federal, state, and local law." There needs to be a means for ensuring that state and local STW practitioners and employers are providing safe worksites for students and are not negligent in these areas. For example: Are states requiring various liability and accident insurance before off-siting students? Are "checklists" in place that teachers use in ascertaining potential risks? What kinds of supervision and/or monitoring are in place once a student is placed? What types of pre- and in-service training are provided educators on how to appropriately place students in STW activities?

Central Source for Information: During the workgroup's discussion there was a sharing of information on what some states are doing in the area of risk management and an identification of best practices states/locals are using to address risk management issues. For instance, some states engage many employers of all sizes despite the liability issues. Other states have developed technical assistance guides and professional development opportunities to protect against risk situations. This information is very useful, and a formal means for identifying and distributing this information to all STW stakeholders is essential. Without a system to share this information, states are left to struggle on their own with issues that are common to the school-to-work initiative nationwide.

Definitions of Insurance Coverage: There are types of insurance coverage currently available which will be useful to the school-to-work initiative. These include workers' compensation, general liability insurance, accident insurance, catastrophic insurance, transportation insurance and unemployment insurance. And although various states have addressed these issues, there is no national statement available about these types of coverage, their associated costs, exposures, and dimension of risk and how they may apply to school-to-work situations for employers, schools and students (see Attachments). Having a comprehensive knowledge base about insurance and other risk-related issues such as the Fair Labor Standards Act and Child Labor Laws is basic to successfully implementing school-to-work.

Insurance Product Review and Development: The goal of providing work-based learning opportunities for <u>all students</u> is a new and unique phenomenon for the United States. Note that the word <u>all</u> is underlined. Many of these off-site activities have occurred for years but for a relatively small number of students. Cooperative Education is one of these examples. STW, however, is for all students and that alone magnifies the need to address risk management issues. Through the increase in numbers, the exposure becomes greater. The workgroup has found that although student basic accident insurance exists and provides certain minimal coverage, it is often voluntary. This means that many students and parents who choose not to subscribe may not be adequately covered for personal injury or not covered at all. In addition, some student accident policies contain exclusions for certain activities and locations, and impose restrictions on times that coverage actually exists. In many situations, catastrophic accident insurance (similar to a major medical plan) exists only for individuals engaged in sports and not for the general school population. There is little, if any, information available about existing insurance coverage for protecting employers from damage students may do to product or employees at a worksite. Individual states have legislation and/or regulations that address school transportation issues but with the tremendous increase in off-campus placements for STW activities, schools, students and parents will incur an even greater exposure to transportation-related injuries.

At a minimum, existing school policies should be reviewed to find out what is and is not covered, and what are the time restrictions involved. Supervisory union/school district business managers play a key role in the review and policy purchase process. It may also be necessary to encourage the insurance industry to research the school-to-work initiative to see if any new types of insurance are necessary or more appropriate considering the large numbers of students participating and the variety of off-campus worksites.

Other Liability Issues: It is important to note that participants in work-based learning activities expose themselves to other types of risks other than being physically injured at the work site. Among these are the risks of sexual harassment of students, discrimination

and whistle blowing. Each of these areas needs to be addressed before work-based learning can be carried on with a minimum of uncertainty about consequences of potential events.

Unemployment Insurance: Are students in paid work-based learning situations covered by unemployment insurance? Historical precedent has addressed the college student's participating in a credit-bearing paid internship. But with so many secondary-aged students now participating in paid, credit-bearing work experiences, it is important to clarify the federal and states' laws regarding employers' UI exposure. There is evidence (legal and experiential) that suggests that any student (under 22) participating in a school-sponsored, credit-bearing, school-certified, paid, work-based learning situation may not be covered by UI and thus their host employer may not incur a UI liability. However, at this point, no official interpretation or guidelines have been issued from the US Department of Labor on how to apply this exemption to school-to-work activities. This will be researched and included in the national technical assistance guide that is being prepared.

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RISK MANAGEMENT INSURANCE OPTIONS

			SCHOOL		EMPLOYER	
CATEGORY	ACTIVITIES	Liability Ins.	Basic Acc. Ins.	Catastrophic Acc. Ins.	Liability Ins.	Workers' Compensation
Field Trips						
	Educational Visit/Tour	Verify	School Determined	School Determined	Verify	Not Appropriate
Non-Paid						
	Job Shadowing	Verify	Recommended	Recommened	Verify	Not Appropriate
	Mentoring	Verify	Recommended	Recommened	Verify	Not Appropriate
	Capstone Project	Verify	Recommended	Recommened	Verify	Not Appropriate
	Service Learning	Verify	Recommended	Recommened	Verify	Not Appropriate
	Unpaid Work-based Learning	Verify	Recommended	Recommened	Verify	Not Appropriate
	Student Entrepreneurship	Verify	Recommended	Recommened	Verify	Not Appropriate
	Cooperative Vocational Ed.	Verify	Recommended	Recommened	Verify	Not Appropriate
	Employer/Teacher Internship	Verify	NO	NO	Verify	Not Appropriate
Paid						
	Student Entrepreneurship	Verify	Not Appropriate	Not Appropriate	Verify	Required
	Supported Employment	Verify	Not Appropriate	Not Appropriate	Verify	Required
	Registered Apprenticeship	Verify	Not Appropriate	Not Appropriate	Verify	Required
	Cooperative Vocational Ed.	Verify	Not Appropriate	Not Appropriate	Verify	Required
	Other Pd Work-Based Learning	Verify	Not Appropriate	Not Appropriate	Verify	Required
	Employer/Teacher Internship	Verify	Not Appropriate	Not Appropriate	Verify	Required
	Student Apprenticeship	Verify	Not Appropriate	Not Appropriate	Verify	Required

Attachment A

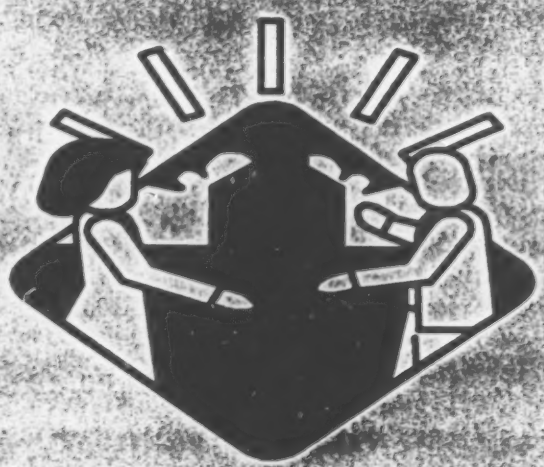
SCHOOL-TO-WORK RISK MATRIX

			RISK	
CATEGORY	ACTIVITIES	Student/Parent	School	Employer
Field Trips				
	Educational Visit/Tour	School Determined	School Determined	School Determined
Non-Paid				
	Job Shadowing	Medium-High	Medium-High	Medium-High
	Mentoring	Medium-High	Medium-High	Medium-High
	Capstone Project	Medium-High	Medium-High	Medium-High
	Service Learning	Medium-High	Medium-High	Medium-High
	Unpaid Work-based Learning	Medium-High	Medium-High	Medium-High
	Student Entrepreneurship	Medium-High	Medium-High	Medium-High
	Cooperative Vocational Education	Medium-High	Medium-High	Medium-High
	Emmployer/Teacher Internship	None	Medium-High	Medium-High
Paid				
	Student Entrepreneurship	Medium	High	High
	Supported Employment	Medium	High	High
	Registered Apprenticeship	Medium	High	High
	Cooperative Voc. Education	Medium	High	High
	Other Paid Work-Based Learning	Medium	High	High
	Employer/Teacher Internship	None	Medium	Medium
	Student Apprenticeship	Medium	High	High

Field Trips: School Determined based on # of trips and types of sites.
Risk higher than normal school time activities, other than sports, conducted away from school site.

Attachment B

Building Business Awareness in Rural New York



Presenters: Jean Stevens
Robert Drake
Candace Huber
Betty Powers
Kris Reuland

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Background

New York State envisioned a school-to-work system that will ensure that, "All students are prepared to be productive citizens, members of the high performance workplace, and lifelong learners." To that end, school-to-work is providing the necessary systemic structure to a multitude of initiatives, programs and activities to enable all students to achieve higher academic and workforce preparation standards. School-to-work is not a stand-alone initiative in New York State but builds upon prior legislative initiatives to improve education and workforce preparation.

- In 1991, the Board of Regents, which is the governing body of the educational system in the State, revised its goals for elementary, middle and secondary school students to reflect a common vision of the skills students will need to live and work in the 21st Century.

- The Board of Regents adopted A New Compact for Learning reflecting these goals and providing the impetus to bring together all segments of the community to reform the educational system through collaborative efforts.

- During 1992, the Governor's Career Pathways Task Force published the report Education that Works: Creating Career Pathways for New York State Youth recommending the creation of an integrated approach to workforce preparation.

- The Board of Regents initiated the Workforce Preparation Pilot Program in 1993. Twelve pilot sites were funded through appropriations by the State Legislature to address the key elements addressed in the Career Pathways report.

- The state legislature continued its support by appropriating $3.75 million to fund 37 Workforce Preparation System Grants to continue building a systemic approach to workforce development through community partnerships.

- The Board of Regents and the Commissioner of Education appointed the New York State Curriculum and Assessment Council to provide a framework to take the Compact for Learning from theory to reality.

- The Federal School-to-Work Act of 1994 provided funding to New York State as one of eight states to begin their approach of drawing upon this rich history of workforce preparation to develop a comprehensive statewide system of preparing students from kindergarten through age 24 for school and work.

- By 1996, the Board of Regents had approved the work of the Curriculum and Assessment Council which identified twenty-eight learning standards addressed in seven curricular areas. School districts are aligning curricula, assessments and school-to-work activities to the standards in the areas of English Language Arts; Math, Science and Technology; Social Studies; Languages other than English; Health, Physical Education and Home Economics; The Arts; and Career Development and Occupational Studies (CDOS).

As New York State is diverse in geographic distribution, a "one size fits all" approach is not feasible. Fifty local partnerships are currently funded across rural, suburban, and urban areas of the state. The partnerships may work with one large urban school district, such as in the Cities of Buffalo or Rochester, hundreds of schools in each of the five boroughs of New York City where partnerships serve as "hub sites", or with anywhere from 10 to 60 school districts, as is the case in most rural partnerships. As governing bodies, the vision for the local partnerships is to collectively design, plan and implement a school-to-work system in their region as part of the statewide system. This effort has created new levels of collaboration among business, educational institutions, community organizations, and government entities across city, town and county lines. Today, we are focusing on the rural areas of New York State, which comprise 44 of the state's 62 counties. One-half of the fifty funded school-to-work partnerships are in rural communities. These partnerships are collaborating with 58% of the state's school districts which serve 22.5% of our public school students. The New York State Rural Education Advisory Committee (REAC) is assisting rural schools in creating an awareness and disseminating a common vision of school-to-work.

Common challenges associated with implementing school-to-work in rural areas are: time and place issues such as transporting students and faculty for field trips, career explorations, and work-based experiences; the low density of business and industry in rural areas as well as the size of rural businesses--typically small or medium; the possibility of over-saturating the business community with requests from schools and overburdening small or owner-operated businesses; and the perception that in better preparing rural students for both postsecondary education and careers, we are preparing our students to leave our rural communities. The four local partnerships representing New York State will share with you how they are creating the infrastructure and community collaboration in designing innovative strategies to overcome these barriers to building a school-to-work system.

Several of New York State's rural school-to-work partnerships have developed a database system of business services and referrals. The GLOW Partnership will begin the panel discussion from a global perspective of addressing a primary concern of business partners-over-saturation of the limited number of businesses in rural areas.

The GLOW School-to-Work Partnership

Background

The GLOW Partnership comprises four counties in a rural area of approximately 2300 square miles. The Partnership consists of twenty-nine school districts, two State University of New York postsecondary institutions--a community college and four-year college, the Board of Cooperative Services (BOCES) area vocational center, the Business/Education Alliances, the Private Industry Council, community organizations and local government. The major employers in the area are government and educational institutions. Most other employers are small and medium businesses. In each of the four counties, Business/Education Alliances have been developed as a means to promote business and education collaboration. Membership of the Alliances are representative of the school-to-work partnership and include local businesses, educational institutions, community and government organizations. They meet on monthly basis to discuss issues of mutual concern around preparation for work. Typically, the Alliances work with school districts within their counties to design and facilitate educational programs that include business participation in school and work settings.

What It's All About

As business collaboration grew within the multitude of schools and school districts within the counties, the businesses identified a need for a coordinated effort among counties to contact businesses for participation in educational activities. Educators, in attempting to create more authentic opportunities for their students in both the classroom and the community, requested a means to identify the services businesses are willing to provide to the schools. The Business Resource Guide was created in 1994 in response to these needs. The guide serves to provide a tool for teachers and students to use in identifying career information and resources in the GLOW region. It is also used by the Employment and Training Agencies and other community agencies in placing students and faculty in summer work experiences. The guide has also assisted community organizations and local employers by targeting their services to schools.

Getting Started

The goals of the initiative were to: (1) increase the number of businesses collaborating with schools, and (2) provide a central listing of potential business partners for teachers, students and others to use as a tool to identify career information and resources. Steps taken to accomplish this goal were as follows:

- Identify the need for the resource guide after communicating in writing and by telephone with the business and education members of the Alliances.
- Secured access to mailing lists of employers through the Industrial Development Agencies.
- Identified information to be included in the guide and developed a letter and user-friendly response form explaining how the information will be used.
- Mailing to approximately 800 companies in the four-county area and follow-up phone calls to nonrespondents whose input was felt to be important to the project.
- Resource Guides were assembled and distribution to the 29 school districts in the region.
- Training sessions for use of the guide were conducted at faculty meetings.
- Employer handbook provided as a guide to work with schools.

The coordinators of each of the four Business/Education Alliances and the staff of the School-to-Work Office worked with local employers, Chambers of Commerce, Industrial Development Organizations, Department of Labor, the Genesee Valley BOCES and the local school districts' faculty and students in completion of this initiative.

Budget

As one of the state's 37 Workforce Preparation Projects, funding for the project was initially provided by the region's grant with additional contributions from the Alliances. The GLOW School-to-Work Partnership Grant provided subsequent funding to complete the project. Approximately $4,500 has been expended in publishing costs.

Results

- Over 500 businesses have agreed to interact with the schools.
- An increase in the number of teachers and students engaged in work-based activities has resulted.
- Businesses have a better understanding of the educational programs and collaboration.

Barriers to Overcome

- Initially the resource guide was to be published on diskette. Lack of uniform software and access to computers at the school district level resulted in hard copy publication.
- Involvement of more teachers and students.

As the services and resources of rural businesses are channeled through a central referral listing, businesses are collaborating with schools in increased numbers. Active collaborated efforts are occurring to increase school-based and work-based learning to reach higher learning standards. The perception of students not being sufficiently prepared for the demands of the workplace has been addressed by the Southern Chautauqua County School-to-Work Partnership through a unique system of identifying and certifying employability skills. Candace Huber will explain the innovative process developed in Southern Chautauqua County.

The Southern Chautauqua County School-to-Work Partnership

Background

The Southern Chautauqua County, in the far western corner of the state, has a population of approximately 80,000 people, with almost half living in the city of Jamestown. The residents in the 604 square mile area are primarily employed by business providers in the small cities of Jamestown, Falconer and the surrounding area. Among the partnership members are 10 school districts, one BOCES, a community college and a proprietary school, the Private Industry Council, teacher and labor unions, the Department of Labor, and several businesses and industries. Prior to the school-to-work partnership, the Jamestown Area School and Business Alliance (SABA) undertook a comprehensive initiative to upgrade the academic and workforce preparation skills of the area's students. This effort has continued and expanded as a result of school-to-work. Business and education representatives in the region were members of the SABA Board of Directors. The Chief Executive Officers of the businesses represented on the board requested a process to certify that graduating seniors met established employability standards. Business members, the Manufacturers' Association, and the Chamber of Commerce reviewed the local school districts' curriculum and found that the academic standards for a local diploma were too low. Through a review of the different levels of mathematics curriculum and the basic competency test in English, minimum standards for employability were established and reflected in a Business Endorsed Diploma. As a collaborative effort between business and education, a high school workforce preparation continuum was also established.

What It's All About

The initiative developed and implemented a process for certification of employability or the Business Endorsed Diploma for students in grades 9 through 12. Students work to reach the established standards in their academic and occupational classes as well as after

school in the monthly Workforce Preparation classes as part of the SABA Club. Internships, including those during the summer months, also assist students meet the employability standards.

Getting Started

The goal of the initiative was to develop and implement a process to certify that students met established standards of employability identified by employers as a necessity for entry level workers. This involved the following steps:

- Business and education committees were established to review curriculum.
- Area businesses were surveyed to ascertain critical areas for minimum academic and workforce preparation standards.
- Minimum standards for employability were established.

Approximately 120 students from seven participating schools enroll in the program each year. Students are recruited by their guidance-counselors or through presentations to ninth graders by the project staff. Although there is not a target audience for this initiative, students who express interest are typically from the "middle majority" of the student population.

Staffing for the initiative consists of an Executive Specialist, a Program Assistant and a part-time secretary. Volunteers from the business community, school contacts and the Private Industry Council's youth staff volunteers are also utilized.

Budget

The SABA budget of $110,000 includes services beyond the Business Endorsed Diploma. Funding is provided by the School-to-Work Partnership grant, the Chautauqua County Industrial Development Agency and through a COSER funding mechanism school districts can use collaboratively through the local BOCES. In-kind contributions are received from local businesses in the form of tours, work-based learning experiences, speaking engagements, etc. The Private Industry Council has also donated staff time to provide pre-employment training.

Results

Over 90 percent of the students enrolled in the Business Endorsed Diploma complete the program and receive certification. Eighty percent of the students interview and receive summer and part-time jobs at the SABA Job Fair. Additionally, 95 percent of the program's graduates enroll in postsecondary training or education. The recently

completed school-to-work local evaluation found that all students were glad they had participated in a shadowing experience. Seventy nine percent felt they would like to work in a similar job in the future but 51% believed they would have to work harder in school to do so. Businesses have committed to giving the program's graduates a first chance at job openings. Names of the program graduates are printed in the summer edition of the Chamber of Commerce newsletter to publicize the students accomplishment to the business community.

Barriers to Overcome

Barriers or problems to overcome vary from school to school but include recruitment and referral challenges, lack of space for Workforce Preparation class, and time conflicts for students participating in extra-curricular activities, driver education, etc. The lack of public transportation and the vast distance to the jobs are also barriers to student participation..

Transportation issues have been a challenge to other rural partnerships as well. The overall low density of businesses across vast areas of rural New York State has led many of the partnerships to look at innovative ways to address work-based learning for students who are place-bound. The Newburgh Enlarged City School District of Newburgh, NY, established a model for workplace simulations which has excited and inspired many partnerships. Spearheaded by Dr. Annette Saturnelli, Director of Science and School-to-Work for the district, workplace simulations have provided a core instructional strategy to merge school-based, work-based and connecting activities. While educators recognize the simulations do not completely replicate all aspects of the workplace, the simulations do provide work place concepts, terminology, process, and environments for experiential learning and creative problem solving. The Chemung-Steuben-Schuyler Partnership provides one example of the effectiveness of this model.

Chemung-Steuben-Schuyler School-to-Work Partnership

Background

The Chemung-Steuben-Schuyler School-to-Work Partnership (CSS) in the southern tier corridor of the state is a collaborative effort of 17 rural schools in four counties, one community college, the Department of Labor, Career Development Council and the business community. The partnership became interested in workplace simulations as a way to expose more students to work activities at a younger age. This interest was sparked by a demonstration by Dr. Annette Saturnelli of the Newburgh Enlarged School District. The

simulation the CSS Partnership initially developed, Air Bear, followed the Federal Aviation Administration's model simulating all aspects of the airline industry. The partnership is currently developing and piloting six additional simulated experiences during the 1997-98 academic year.

What It's All About

The initiative began in 1996 with the Air Bear Workplace Simulation. This simulated experience is currently being expanded to other grade levels and schools. The workplace simulations are an integral part of the curriculum, creating opportunities for students to apply what they are learning in their coursework and integrate subject matter across disciplines. While the original simulation is targeted to students in the primary grades, additional simulations are being developed for students in grades K through 12. The props and work areas constructed for the simulations are portable and can be moved from classroom to classroom, school to school. At least one business partner is involved in each simulation. Workplace simulations developed by the partnership are:

- Air Bear Airlines, a simulated airport and airplane for students in the primary grades.
- The Flower Shop, a retail simulation for students in the primary grades who are currently drying apples to make wreaths to sell for the holidays.
- Cohen Middle School Store provides experiences in retail management to students in the 6th grade.
- The Television News Service is a course for 8th graders not enrolled in the school music program. Students are producing their own 10 minute weekly news show which is broadcast by the local television station. Student production includes writing, taping and editing of the show which focuses on school news and weather reports.
- Collaborative Glass, a glass bead jewelry business for high school students in special education programs. This collaborative effort with Corning Glass will provide students with experience in all facets of the business, from marketing research to actually making the glass beads in a hot glass studio.
- The Flower Depot is run by high school students in special education programs who grow and sell seasonal plants including painted pumpkins, poinsettias, and herb baskets.
- Economic Development Agency is staffed by 12th grade students in economic classes who are developing a business proposal for presentation to the Economic Development Agency in their area. This year's proposal is for a community teen center.

Getting Started

Workplace simulations meet the CDOS Learning Standards by providing opportunities for students to demonstrate how academic knowledge and skills are applied to the workplace and other settings. The partnership recognized that workplace simulations provide an opportunity to use work-based and academic strategies that are feasible and effective in the community. The simulations integrated into the school day will serve to sustain the school-to-work initiative in the participating schools. Collaboration in designing the simulations is critical. CCS partnered with the Career Development Council, area schools, businesses and agencies, parents, and students at the area vocational center. The project was coordinated through the Career Development Council and School-to-Work Specialist and four staff members of the council who initiate and support the integrated/applied curriculum projects. Classroom teachers work directly with the students on the projects.

Budget

The first simulation, Air Bear Airline, was developed through an $828 School-to-Work mini grant from the local partnership. The development of the additional six simulations is funded through School-to-Work Business/Education Partnership Grants provided by the New York affiliate of the National Partners in Education, Inc. The Council received $23,977 which was used to sponsor a summer design workshop, purchase supplies and materials for building the simulations, and to support the salary of the School-to-Work Specialist who is coordinating this initiative. Local business partners have donated additional supplies and materials and provide time and expertise in designing the simulations as in-kind donations.

Results

Teachers participating in the simulations indicate students have demonstrated increased understanding of workplace attitudes and skills through their participation in the simulations. Students recognize the application of academic content. Teachers who are not presently participating in the simulations as well as other schools in the area have expressed an interest in replicating the project and are currently seeking support to design, implement and expand the workplace simulations.

Barriers to Overcome

- Funding has been provided by outside sources and donations thus far. A secure source of revenue would assist in building upon the success of the simulation initiative.
- The initial design and implementation of the simulations is labor intensive.

- Teachers are required to think creatively and must be willing to change their classroom management style to one of facilitator and coach.
- A coordinating entity has been critical to the design and implementation of the project.

Simulations have also been developed by the Berne-Knox-Westerlo Central School District, a member of the Capital Regional School-to-Work Partnership. The school district has designed and implemented school-to-work activities using a variety of programs and strategies including work-based simulations. Superintendent Robert Drake will provide an overview of the steps the rural schools have undertaken as a district-wide initiative to provide opportunities for all students at all levels to participate in school-to-work activities.

Capital Regional School-to-Work Partnership

Background

The Capital Regional School-to-Work Partnership includes the state's capital, Albany, NY, as well as rural areas in three counties. In addition to a multitude of business, community and local government organizations, there are 15 school districts, the area BOCES Center, and one of the SUNY System's five Colleges of Agriculture and Technology in the partnership. As a member of the school-to-work partnership as well as the Capital Region Tech Prep Consortium, the Berne-Knox-Westerlo Central School District utilized the expertise of both groups in initiating this project.

What It's All About

In the initial stages of this project, the district changed its high school graduation requirements, eliminating less challenging local track courses and creating a more challenging Tech Prep program. Tech Math I through IV were created to emphasize applied learning and to encourage students to take more math courses while in high school. Additional changes to the high school curriculum were as follows:

- Introduction to Occupations, a required course for all students in occupational majors, was changed to Introduction to Tech Prep which is more closely aligned to the CDOS Learning Standards.
- An Applied Chemistry course was created.
- The Agency for Instructional Technology's (AIT) Principles of Technology course was instituted providing an applied approach to physics.

- Applied Communications modules were integrated into Language Arts classes.
- The Career Exploration Internship Program was initiated to provide worksite experiences to high school students.
- Students are encouraged to participate in the Capital Region BOCES New Vision Programs in Allied Health, Law and Government, and Communications.

At the middle school level, the Learning for Life program sponsored by the Boy Scouts of America was adopted. Activities such as the non-traditional role model day were created. The elementary school piloted the "Dreams Unlimited" program which focused on field trips to a variety of workplaces and brought presenters from the community into the classroom. This program currently involves two to three hundred students in grades K through five. After the initial success of the program, a group of teachers and administrators visited the Newburgh schools to view their school-to-work program which had successfully institutionalized workplace simulations within the school district.

The elementary team adapted the Newburgh model and created storefront businesses in the school operated by students and connected to the academic program. The "storefronts" were built in front of the classrooms by community volunteers with donations of materials from local businesses. Hallways, renamed with street names, are labeled with street signs and each classroom has a street address and mailbox. Business partners assisted in the design of the simulations and students developed job descriptions for the many jobs they rotate through within the "store front" businesses. As a result of this extensive collaborative effort, the elementary school supports the following storefront businesses as workplace simulations:

- Berne L.M.N. Tree Bank. Fourth grade students operate the bank as a joint venture with Cohoes Savings Bank.
- Books "R" Us is a bookstore operated by third graders.
- Mountain View Stationery features school supplies sold by third graders to their peers.
- We Deliver Postal Service is a collaboration with the U.S. Postal Service. Second graders deliver the stamped and addressed mail throughout the school.
- First Roadside Stand sells products associated with seasonal themes taught in the first grade classroom.
- Lost and Found is a service run by third graders who have organized a system for returning items lost and found within the school.
- U'hai theater has become a center for presentation by guest readers, career speakers, etc.
- The Print Shop is where students write and publish the elementary school's newspaper.

Budget

The School District was awarded a grant of $5,000 in seed money from the Pioneering Partners Foundation to begin construction of the "storefronts". Small grants from the Capital Region Tech Prep Consortium have enabled the district to create the Tech Prep courses and run the middle school activities. The Capital Regional School-to-Work Partnership has provided opportunities for staff and curriculum development.

Results

As a result of the school-to-work initiative, the Berne-Knox-Westerlo Central School District has experienced greater participation by the community who have shown greater acceptance of the need to relate job readiness to academics. In addition, more students are taking math and science courses at the high school level.

Barriers to Overcome

- Scheduling problems exist for high school students who are participating in internships. The school is presently undertaking a study of alternative scheduling.
- The lack of businesses in the district. This has resulted in the school district reaching out into the Greater Capital District.

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School to-Work Transition: Developing Collaborative Partnerships for the Inclusion of Students with Disabilities at the State, County and Local Level

Presenters: Lucy Ely-Pagan
Bob Haugh
John Grover
Nancy Lauria
Kerry McKenna

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Background

The Individuals with Disabilities Education Act (IDEA) mandates that all students age 14 and older, classified as having a disability must be provided transition programs and services that will prepare them to live, learn and work in the community as adults. IDEA also states that such programs and services should, to the extent possible, be provided to disabled students with their non-disabled peers. The School-to-Work Opportunities Act (SWOA) states that all students, including those with disabilities should have access to all school-to-work (STW) activities. SWOA and IDEA both stress the need to enable students to reach higher standards and increase their skills.

New York and New Jersey have both addressed these mandates by developing collaborative partnerships for the inclusion of students with disabilities at the state, county and local level. Following are overviews of the partnerships that they have formed.

New York State Partnerships

New York State supports the intent of these two laws and the State Education Department has worked very diligently to ensure that all truly means all in the three areas of STW: school-based, work-based, and connecting activities. At the State level, the Office of Vocational and Educational Services for Individuals with Disabilities (VESID), represents disability-related issues on the School-to-Work State Advisory Council. Liaisons from the Offices of Workforce Preparation and Continuing Education and VESID work closely together on all initiatives.

NYS received a five-year transition systems change grant which funded eight regional Transition Coordination Sites to assist school districts with the implementation of transition requirements. This included assistance in areas such as community-based assessment and instruction, person centered planning, staff training, mentors, interagency cooperation, and the development of transition plans (career plans). The information, experience, and contacts derived by the site staff from participation in this process were accessed when NYS received the five-year school-to-work systems grant. The sites were funded with STW monies to provide technical assistance to local STW partnerships for the purpose of ensuring the inclusion of students with disabilities and transition programs and services in the broader area of STW, and to share information, expertise and contacts learned through transition activities. The sites have been providing technical assistance to STW partnerships for two years and will continue through this school year.

To ensure a cooperative effort occurred between the STW partnerships and the sites, the two offices sent a joint memorandum to all the local partnership coordinators requesting that they work cooperatively with the site staff. The sites contacted the partnerships with an offer of technical assistance (here's how we can help you) rather than reminding them that all students must participate. This approach in addition to their experience produced positive teams.

The site coordinators provide technical assistance to local partnerships, individual schools, and any of the participating members of the partnerships in their region. NY has many partnerships in rural areas and has addressed specific issues such as identifying employers who will provide work experience, collaboration among a variety of agencies to jointly provide activities by pooling funds, transportation of students, and staff training. A list of specific types of assistance is attached.

A sample Post-School Indicators Survey has been conducted for the past two years of students in general and special education who have exited school the previous year. The results show that students in all areas of the state, whether in general education or special education, have a better chance of going on to a post-secondary program or being employed in a full-time job if they had occupational education and work experience while in high school. Based on this information and the favorable responses received by the site coordinators, VESID will continue to work closely with the Office of Workforce Preparation and Continuing Education.

New York has a very large geographic area, a very diverse population, and a large number of students in special education. These factors make it very difficult to provide school-to-work for all students. The issue of sufficient funding and support to sustain school-to-work systems change, especially in rural areas where resources are limited, must continue to be addressed.

New Jersey Partnerships

The New Jersey Partnership for Transition from School to Adult Life project is directed by the Office of Special Education Programs, in collaboration with the Office of School-to-Career and College Initiatives, the Division of Vocational Rehabilitation Services, the University Affiliated Program of New Jersey and the Statewide Parent Advocacy Network, Inc. In order to assist students with disabilities in preparation for transition from school to careers, further education or training opportunities, and to independent living, the *New Jersey Partnership for Transition* maintains its purpose to create effective state and local mechanisms for providing transition services that students can access so that they can become contributing members of their communities. This is being accomplished through state interagency collaboration and funding the establishment of

county-based consortia involving local stakeholders. Technical assistance and training are provided through a variety of approaches: statewide activities, customized training and technical assistance to the county consortia members based on needs assessments, and district and student-centered activities.

Project Mission Statement: To establish a statewide coordinated system of programs and services that facilitate the transition of students with disabilities from school to adult life so they are prepared for and connected to opportunities and supports for full participation as valued and contributing members of the community.

Objective 1: Review and revise state policies related to transition for youth with disabilities in the areas of: School-to-Work Initiative; Workforce Development; Education; and Division of Vocational Rehabilitation Services.

- An interagency agreement was developed to outline common objectives regarding transition for seven state agencies working in collaboration. An agreement was signed in May of 1995. The State Interagency Work Group is presently in the process of revising and expanding a new interagency agreement. It is anticipated that a new agreement will be signed during Year 5 of the grant (the 1997-98 fiscal year).

- Establish and maintain a workgroup of state agency directors from Office of Special Education Programs, Division of Vocational Rehabilitation Services, and Office of School-to-Work Initiatives to review and develop policies regarding transition.

- Provide input into the School-to-Work (STW) RFP and cross reference transition RFP to promote collaboration at a local level among the Workforce Investment Boards (WIBs), STW local partnerships, transition county consortia and DVRS local offices.

- The STW local partnerships and transition county consortia are collaborating to ensure that students with disabilities are part of the STW system. Cross-training has been held and will continue to be offered among STW and transition stakeholders. Transition project staff have been involved in reading, scoring grant applications, monitoring local STW partnerships and joint Project Director meetings have been held.

- As a result of the Directors' Forum in January 1997, a critical policy recommendation was highlighted. The Unified State Plan for New Jersey's Workforce Readiness System, published in August 1996, includes a recommendation from the State Employment and Training Commission that: *The Transition County Consortium, established by the Departments of Education and Labor, must actively participate with the Workforce Investment Board's (WIB's) School-to-Work Opportunities committee to strengthen the representation of students with disabilities. This will also help to integrate transition of students with disabilities into the broader workforce development policy of the WIBs. The liaison between the consortium and the WIB will be the local office manager of the Division of Vocational Rehabilitation Services.*

- A Q & A document was developed and disseminated to parents, educators, agency personnel and community-based organizations. This document serves as a valuable resource. This past year it was made available on the New Jersey Home Page.

- DVRS policy was changed to allow DVRS counselors to receive referrals within two years of graduation, if appropriate, and provide technical consultation to students, when they are more than two years away from graduation or not ready to file applications for services at the time. In response to the revision of rehabilitation regulations this past spring, DVRS will provide for the development of the IWRP (Individualized Written Rehabilitation Plan) prior to graduation for each student determined to be eligible for vocational rehabilitation services or, if the agency is under an order of selection, for each student able to be served under this order. The IEP guidelines developed by the project address the relationship and the consideration of the IEP and IWRP.

- Cost sharing for transition services between LEAs and DVRS is being piloted in two counties. This has resulted in the establishment of ten positions for transition services. In addition, OSEP is funding DVRS $300,000 for the establishment of six additional counselor positions dedicated to LEAs in six counties.

Objective 2: Establish and support county-based consortia to coordinate and expand transition services throughout the state.

- Eighteen Transition County Consortia have been funded to develop and coordinate transition services at the county level. Beyond the first year of funding, the LEA has a three-year commitment to maintain the project. Regularly scheduled meetings of grant project directors were held for progress reporting, information

dissemination and problem solving. In addition, joint meetings of transition consortia and the local school-to-work partnerships are held to build cooperation and collaboration at the local level.

- The majority of the training and technical assistance offered through the project was dedicated to the local county transition consortia and the remaining non-funded counties. Project staff worked intensively in all 21 counties of the state. The major themes of the training and technical assistance were on transition planning and IEP development; self-determination training for professionals and students; community-based instruction; parent-professional collaboration; and service coordination and resource identification.

Objective 3: Develop and implement a cadre of activities around self-determination for transition from school to adult life for parents, students and professionals.

- Self-determination training sessions have been held for students and/or professionals throughout the state. Leadership training was provided to families and natural support networks for students with disabilities to ensure their participation in transition services.

- Through this grant, SPAN has taken the lead in the development of a Parent Resource Network. The goal of this network is to have parent trainers and advocates in each of the twenty-one counties in New Jersey. Twenty-five parent advocates have been identified (at least one from each of the counties in New Jersey). These parents have received intensive training through this project. They come together four times a year for training and team building activities. They are resource parents for other parents of students in transition in their county. These parents are encouraged to join their local county-based transition consortia and will be connected to the project through SPAN, Inc.

Objective 4: Increase parent and family access to information regarding transition regulations and best practices to empower them to effectively participate and assist their children in the transition to adult life.

- Contract with consultants to provide training and technical assistance at the state, county, LEA and school levels regarding regulations and best practices in transition and collaboration for parents, families and professionals (UAP/SPAN training and technical assistance). Cross training will be encouraged.

- An in-state system of training and technical assistance has allowed the project to support local interagency teams, consumers, school districts, employers and community service providers and members. All activities of this component are directed toward local capacity building with an emphasis on student and family empowerment.

Objective 5: Provide training, technical assistance and disseminate information to parents, professionals and other stakeholders to increase knowledge of best practices in transition.

- Technical assistance and training have been made available on demand throughout the state via the Transition County Consortia and the School-to-Work Local Partnerships. Topics for training and TA include: *Transition Training for Case Managers; Transition Service Delivery and Best Practice; Transition and the IEP; Leadership Training for Families in the Transition Process; Strategies for Vocational Assessment; Strategies for Developing Functional Curricula; Person-Centered Planning; Training for Vocational Rehabilitation Counselors; Training for Teams of Vocational Education and Child Study Team Personnel*. In addition to the training topics that were provided, accompanying training materials are available for each topic. The following also relate to this activity:

  ⇒ A training package on Transition Guidelines will be developed and implemented during the 1997-98 grant year.

  ⇒ Model Demonstration of Students with Severe Disabilities in the School-to-Work System: This project provided technical assistance to support the successful participation of students with severe disabilities (e.g. students with deaf/blindness; students with severe physical disabilities who require the use of assistive technology) under the School-to-Work Guidelines. A video production and report with case study information including the nature of the IEP planning, school-based, work-based and connecting activities will be developed during Year 5 of the grant. Barriers, successful strategies and recommendations for the increased participation of students with severe disabilities in the School-to-Work System will also be included in the report.

  ⇒ Training for Students, Parents and Professionals Regarding Preparation for Post Secondary Education: It was determined through needs assessment information from the transition county consortia and from other parents and professionals in secondary and higher education that training needs to be offered to provide

students, parents and professionals strategies to conduct appropriate planning for transition to college. Training and technical assistance were developed and implemented to address these needs. Written guidelines were developed and distributed to all participants in training and technical assistance activities.

⇒ Intensive technical assistance was delivered in response to specific requests from individual parents and parent support groups across the state. This deliverable includes phone consultation, on-site technical assistance, attendance at parent meetings, school visits, and other presentations and training sessions.

⇒ The Division of Vocational Rehabilitation Services received customized training for their field staff on topics determined by counselors.

⇒ In order to promote the inclusion of students with disabilities in the school-to-work system, the New Jersey Partnership for Transition is contracting with The Arc of NJ to provide technical assistance services regarding this area of need. The types of strategies to be utilized include but are not limited to: self-determination training; investigating the use of Social Security's Impairment Related Work Expenses and Plans for Achieving Self-Support; functional vocational evaluation; assistive technology; curriculum modification; and supported employment, etc. The Arc will also assist the LEAs in developing the necessary support services and interagency linkages to support students with disabilities in the school-to-work system.

Products & Dissemination

Stakeholders knowledge of transition best practices and their ability to implement these best practices has been increased through training materials and publications. The following is a status of publications for Year 4:

- "*What is Transition From School to Adult Life?: A Resource Manual for Youth with Disabilities*", a third edition will be printed this year.

- Transition Guidelines for Professionals, Parents and State Agencies (to be completed Fall, 1998).

- The publication *"Why Not College? A Handbook for Individuals with Disabilities"* is on schedule to be printed this current year. The project has contracted with experts in the field of learning disabilities in order to edit the document and make it more user friendly for students with learning disabilities. This document has been used in conjunction with regional training for

professionals, parents and students. The project will continue to use this resource as part of the training curriculum.

- *"It's Your Life: Live it to the Max - A Self-Determination Manual for Students with Disabilities"* was developed during Years 2 and 3 of the grant and was printed and disseminated during Year 3. During Year 4, a second printing was completed. A third printing is anticipated in order to keep pace with the great demand for training on this topic.

- *"A Guide to Developing an Effective County Interagency Transition Consortium"* was developed and disseminated during Year 3. This publication was also utilized during Year 4 to assist the emerging county consortia.

- *"A Parent and Family Handbook on Transition"* will be printed and disseminated during Year 5.

- A video production, *Voices of Experience: School-to-Career Through College* has recently been developed for students by students. The theme of the video is self-determination.

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School-to-Career Project-Based Learning— A Teacher Friendly Workshop

Presenter: Ronald Millican

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Background

Project-Based Learning is designed around the concept that students learn more easily, understand more completely and retain knowledge more thoroughly when they are involved in hands-on curriculum related projects. Using this concept, a pilot with nineteen curricula-based projects was developed and implemented with Warwick classroom teachers during 1996-97. All projects were designed to include school-to-career concepts and SCANS competencies as well as incorporate basic skills such as research, writing, critical thinking and problem solving. They were also structured to develop a student's communication ability through the use of project presentations to parents and teachers.

The projects introduced a variety of community-based partners from careers such as architecture, finance, the arts and desk-top publishing. The partners assisted the teachers as facilitators in the classroom and brought a level of professional expertise directly related to the project content.

What It's All About

Using the project-based learning concepts and experience gained from the successful establishment of these projects, an initiative was designed to introduce teachers to school-to-career through the use of a workshop format. This workshop is structured to assist teachers in taking existing curriculum and designing a project that engages students and demonstrates the relevance of the material to their current and future lives. The projects are enhanced through the addition of site visits and the inclusion of volunteer classroom facilitators who work in professions related to the projects. The facilitators bring an added expertise into the classroom while working with the students on their projects.

The workshop was developed over three year's. It may be offered to any teacher from K-12 that is interested in introducing innovative and meaningful instruction into the classroom by using a project-based format. Sessions may be held in two, two-hour sessions at the end of the school day.

This initiative is in collaboration with the Rhode Island Federal School-To-Career grant and is conducted in several school districts throughout Rhode Island. In addition, the University of Rhode Island School of Education has incorporated the workshop into a week-long seminar conducted for graduating seniors.

Barriers to Overcome

Some of the barriers that have been encountered are finding time and incentives for teachers to commit to the workshop, and implementation of the projects in the classroom.

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Connecting Learning and Work: Roles and Leadership for Higher Education

Presenters: Danial Via
Ivan Charner
Judy Nelson
Lee Williams
Jan Wilson

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Background

In early 1997, the Education Commission of the States (ECS) sent a "scenario" to 20 states. The scenario was meant to be a thought piece that illustrated the type of ground-breaking initiatives that ECS was interested in supporting in its new project "Connecting Learning and Work: Roles and Leadership for Higher Education" which has received principal funding from the Pew Charitable Trusts.

The scenario described a mythical history department at a mythical state research university. The state's governor and legislature had issued calls to create a seamless kindergarten through lifelong educational structure that provided students with high academic skills, and prepared them for the workplace and lifelong learning. The university had recently forged a new mission statement that included the following elements among its new strategic directions:

- strengthening undergraduate education;
- more career preparation initiatives for students; and
- working with the community.

The history department had agreed to pilot a departmental structure that encourages both student academic and career development. The scenario described in detail the possible policy, cultural and administrative obstacles that might have to be overcome to introduce such new concepts and structures into a very traditional corner of higher education.

What It's All About

With the scenario as a background, the states were asked to submit proposals for a collaborative project focused on higher education that reflected the underlying principles of connecting learning and work:

- high academic standards for students;
- opportunities for students to learn in an applied setting;
- linkages among K-12, two-year and four-year campuses, and the community and employers;
- a strategy to involve state leadership; and
- a process for assisting students identify and step into successful careers.

Nine states submitted proposals and six states (Colorado, Minnesota, New Jersey, New York, Oklahoma, and Wisconsin) were chosen as the initial participants in the project.

Detailed preliminary planning for each state's project is now being concluded with implementation to begin in 1998. The projects are quite varied.

Colorado: a project using the writing curriculum as a model for integrating academic standards and contextual learning across K-16.

Minnesota: a rural community focused project to provide a comprehensive set of career awareness and guidance experiences across the local K-12 school system, a local community college, and a regional state university.

New Jersey: a project involving several state postsecondary institutions in efforts to better prepare workers for the high technology, and research and development job sectors that are integral to the state's economic future.

New York: a series of pilot projects focusing on identifying and reporting student competencies at a private research university, a private technical university, a state technical college, and a public community college that will be generalizable to similar institutions, and useful and useable across institutional types and sectors.

Oklahoma: a project to better equip the graduates of history and geography programs from a public research university with skills that make them more employable in the broader job market.

Wisconsin: a project in the teacher education department of a state university to teach new teachers how to instill a combination of academic and workforce competencies into their students.

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About the Conference Speakers

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SCHOOL TO WORK

JONDEL (JD) HOYE

JD Hoye is the Director of the **National School-to-Work Office**, a joint initiative involving the U.S. Departments of Education and Labor. Ms. Hoye and her staff support state and local efforts to develop School-to-Work systems to help improve education and better prepare students for college, careers and citizenship.

She has spoken at hundreds of national conferences, traveled to virtually every state, and works closely with business, educators, labor, and community organizations to build partnerships that enhance learning opportunities for America's young people.

The **School-to-Work Opportunities Act**, passed with overwhelming, bipartisan support in 1994, provides limited-term federal grants for states and communities to create school-to-work systems that are responsive to local needs. It does not create a new, top-down federal program, but allows states and their partners to bring together education reform, worker preparation and economic development efforts to improve our young people's knowledge and skills, and help them live successful, meaningful and prosperous lives.

Ms. Hoye had been committed to and involved in efforts to improve youth and adult training for more than 20 years when she was appointed Director in 1994. Before coming to Washington, she was associate superintendent of the Oregon Department of Education and Office of Community College Services, responsible for professional, vocational and technical education. She represented Oregon on the State Directors of Vocational Education, the U.S. Department of Labor National Standards Committee, and the New Ways to Work Advisory Board. Ms. Hoye previously was executive director of the Oregon Consortium and the Oregon Private Industry Council, a 27-county organization under the Job Training Partnership Act.

Ms. Hoye received the Miss America Organization's Woman of Achievement Award from Miss America 1996 Shawntel Smith during the nationally televised pageant. The $100,000 award was contributed to establish the American Dream Awards, a scholarship program to help students reach their career goals and support educators' and mentors' innovative School-to-Work activities.

Ms. Hoye also created the National School-to-Work Learning & Information Center that uses advanced information technology to provide information, assistance, and training to help build School-to-Work systems across the country. The Center can be accessed at (800)251-7236 or http://www.stw.ed.gov.

A dynamic speaker and tireless advocate, Ms. Hoye is intensely serious about her work, but never takes herself too seriously, and somehow finds time for gardening, rafting and sailing. Her broad understanding of America's diversity was cultivated while growing up in a military family, where she developed through her travels an affinity for many communities throughout the nation. As the National School-to-Work Office Director, she sees her role as encouraging others, with her ultimate, signature compliment . . . "Cool."

CONNECTING LEARNING AND WORK:
The Rural Experience

FEATURED SPEAKERS

Peter Butler is the Engineering Manager at Procter & Gamble in Mehoopany, Pennsylvania. He has been with P&G for 21 years in Manufacturing Management. He has led a Pennsylvania STW Benchmarking Team to Germany, Austria and Switzerland in September 1996 and has established replications of Regional School-to-Work Systems at several Procter & Gamble sites in the US. Among Mr. Butler's numerous community activities, he serves as Chairman for the Northern Tier Industry and Education Consortium, and Chairman for the NE Pennsylvania STW Leadership Council. Mr. Butler received a BS in Engineering at Clarkson University and served four years with the US Army Corps of Engineers.

Ivan Charner is Vice President and Director of the Academy for Educational Development's National Institute for Work and Learning. He is responsible for the design, development and management of projects and national programs dealing with education reform, school-to-work transition systems, and adult learning and literacy. He works with state and local school systems, corporations, government agencies, and community-based organizations to integrate and improve education, training, and career-related systems. He provides technical assistance and training in school reform and restructuring, building school-to-work transition systems, evaluation methodology, system-building in communities, and school-business partnerships. Mr. Charner is currently a senior member of the National School-to-Work Information and Learning Center, an information and technical assistance clearinghouse. Mr. Charner is author or co-author of numerous publications on school reform, youth transition, postsecondary education, and employment and training.

Diana DeLuca is Director of the project, Roles and Leadership for Postsecondary Education in Connecting Learning and Work, housed in the higher education unit of the Education Commission of the States. She is working with higher education institutions and policymakers in six states to examine how the principles of connecting learning and work can bring about significant change on the nation's campuses and in state policy. She has a doctorate in English from the University of Washington and has been a faculty member, assistant dean, and special assistant to the president at various campuses of the University of Hawaii.

James Dillon was named Acting Commissioner of the NYS Department of Labor by Governor Pataki in June 1997. Prior to his appointment, Commissioner Dillon served for more than two years as Executive Deputy Commissioner of Labor. During his tenure at the State Labor Department, Commissioner Dillon was charged with overseeing the Department's Welfare-to-Work initiatives and creating inter-agency partnerships to expand employment and training opportunities to successfully transition those on public assistance into gainful employment. He currently serves as Member and Secretary of the

Board of Directors of the Interstate Conference of Employment Security Agencies and was Vice Chair of that organization's Automation and Technology Committee. He is also a member of the NYS School-to-Work Advisory Council and Chair of the Business Application Subcommittee of the NYS Information Resource Management Task Force. Commissioner Dillon is a graduate of St. Michael's College in Vermont and holds a Master's Degree in Public Administration from the Rockefeller College at the University at Albany.

Stephen Hamilton is Professor and Chair of Human Development and Family Studies at Cornell. After graduating from Swarthmore College, he received a Master of Arts in Teaching degree from Harvard and taught for three years in a Washington DC vocational high school before returning to Harvard for a doctorate in education. Professor Hamilton's primary concerns are with adolescent development and education. A major portion of his responsibility at Cornell involves developing youth programs as part of Cooperative Extension. His research investigates the interaction of school, community, and work during the transition from adolescence to adulthood. As a Fulbright Senior Research fellow, Professor Hamilton spent a year studying Germany's apprenticeship system. As Director of the Cornell Youth and Work Program, he helped develop a youth apprenticeship demonstration project in Broome County, New York. Research on this project addresses informal teaching and learning in workplaces. He has also investigated school-to-career transition systems in Sweden, Denmark, Austria, and Switzerland.

J. D. Hoye is our Keynote Speaker. Her biography is included on a separate page.

Karen Johnson is a Program Manager for the Employment and Training Project of the National Conference of State Legislatures in Washington DC. In that position, Ms Johnson conducts analyses of federal and state related policy, legislation and regulations. In addition, she writes magazine articles for *State Legislatures Magazine* focusing on school-to-work transition and youth development issues. Prior to joining NCSL, Ms Johnson was a classroom teacher, a public school administrator, and for many years supervised trade and technical education programs in the Job Corps. She did her undergraduate work at the University of Colorado and her graduate work at Colorado State University.

James Kadamus has served as a senior manager in the New York State Education Department for the last thirteen years. In February 1996, he was appointed Deputy Commissioner for Elementary, Middle, Secondary and Continuing Education. He provides leadership for the Department's programs and services for elementary, middle and secondary school pupils and agencies and continuing education students and families. As Deputy Commissioner, he oversees four major offices: Curriculum, Instruction and Assessment; Workforce Preparation and Continuing Education; New York City School and Community Services; and Regional School and Community Services. Mr. Kadamus has a Bachelor of Arts from Union College and a Masters in Regional Planning from the University of North Carolina where he specialized in social and education policy.

Dean Monteith was hired as the first School-to-Work Administrator for the state of North Dakota in 1994. He has served on the Mandan Public School Board since 1988. He has over 20 years of experience in public and private planning and development work, a Master's Degree and he continues to try to learn new things every day.

Frank Newman is President of the Education Commission of the States, a national organization created in 1965 by the states as an interstate compact to help state leaders formulate public policy in education. Dr. Newman has a diverse background in education administration, higher education and policy formation. He has written numerous articles and publications. Dr. Newman previously was president of the University of Rhode Island and director of university relations at Stanford University. He serves on numerous advisory boards and commissions across the country, including the Advertising Council's Advisory Committee on Public Issues. He holds a Ph.D. in History from Stanford University, a MS in Business from Columbia University, a BS in Engineering from Brown University and a BA in Naval Science and Economics, also from Brown University.

Lynn Olson has written about public education in the United States for nearly 15 years. A nationally recognized education journalist, she won awards from the Education Writers Association, the National Association of Secondary School Principals, and the International Reading Association. She is a senior writer and editor for *Education Week*, an independent, national newspaper that covers education in grades K-12. In 1995, she received a grant from the Alfred P. Sloan Foundation of New York to write a book about the transition from school-to-work for America's young people. Ms. Olson is a graduate of Yale University.

Dick Rahill joined Corning Incorporated in 1960. He pursued a career in sales and marketing until he became Business Manager of the Lighting Products Department in 1978. In 1980, he was named Vice President of Corning Enterprises Inc., a wholly owned subsidiary of Corning Incorporated. Mr. Rahill was named President in October 1988. As President of Corning Enterprises, he has focused the organization on the following initiatives designed to improve the quality of life in the region: Economic Development, Tourism, Education, Community Diversity Awareness and Arts and Culture. Mr. Rahill is a member of the Board of Governors of the United Way of America and chairs the Pledge and Information Processing Committee. In 1996, Governor Pataki appointed Mr. Rahill to the New York State Health Systems Planning and Review Board. Mr. Rahill holds a BS degree from St. Bonaventure University.

Andrea Snyder is a Senior in Berne-Knox-Westerlo Central School District. She currently is participating in a Career Exploration Internship Program, and is interning at a veterinary hospital as part of her experience. Berne-Knox-Westerlo Central Schools serve the rural communities in the hilltowns of Albany County in New York State.

CONNECTING LEARNING AND WORK:
The Rural Experience

WORKSHOP PRESENTERS

WORKSHOP 1 ***Making Entrepreneurship Education Work: The REAL Enterprises Model***

Rick Larsen has been National Director of REAL Enterprises since 1995. He was hired by REAL Founder Jonathan Sher in 1988 and served as Executive Director of North Carolina REAL Enterprises until 1996. Before joining REAL, Rick worked as a community organizer, small business consultant, and in financial and manufacturing positions with the Cummins Engine Co., a Fortune 500 diesel engine manufacturer. He earned a Masters of Public and Private Management from Yale University.

Lisa King has taught at Otter Valley Union High School in Branden, VT for the past eight years. She also serves as computer coordinator for OVUHS. Lisa is in her third year of teaching REAL and has served as a staff person at the REAL Institute.

Mark McGee is a 1997 graduate of Otter Valley Union High School where he participated in the REAL program for two years. He is in the process of applying to post-secondary schools to further his entrepreneurial education.

Brendan Shea is a 12th grader at Otter Valley Union High School. He is developing a food service delivery business through REAL. Other students may be joining the panel as well.

WORKSHOP 2 ***Small College + Small Communities + Industry: Share Our Strategies for Success***

Ray Chelewski currently serves as the AgriScience & Natural Resources and Aquaculture Teacher at Presque Isle High School in Presque Isle, Maine. He also taught Agriculture, Agribusiness, Wildlife Biology and Horticulture in Longmont, Colorado and Raton, New Mexico. Mr. Chelewski also serves as Adjunct Faculty for the University of Maine & Northern Maine Technical College and a member of the Governor's Commission on Secondary Education. Other activities in which Mr. Chelewski has been involved are: Teacher of the Year, Maine Agriculture; Outstanding Tech Prep Educator, Northern & Eastern Maine Tech Prep Consortium; President, Maine Association of Vocational Agriculture Teachers; and winner, President's Youth Environmental Award sponsored by both Presidents Reagan and Bush.

Tim Crowley serves as the Vice President/Academic Dean at Northern Maine Technical College. He has served on the Governor's Task Force for Learning Results in Maine and

has chaired the Academic Affairs Council for the Northern Maine Technical College System for the past two years. Mr. Crowley has served as a member of the Board of Directors for the Aroostook County Action Program for the past ten years. As the Program Director for the Northern and Eastern Maine Tech Prep Consortium, Mr. Crowley oversees the activities of the program and assists in the planning for the future.

David Lee serves as the Training Director at the Madawaska Division of Fraser Papers Inc. In addition to his duties at Fraser Papers Inc., Mr. Lee serves as one of the business representatives on the Tech Prep Steering Board. He is a member of the Advisory Council for Northern Maine Technical College and serves on the Advisory Committee for the St. John Valley Technical Center. As a business representative in these activities, Mr. Lee is called upon to provide valuable input into curricula issues facing today's schools. Mr. Lee and Fraser Papers Inc. were very instrumental in the development of the Pulp & Paper Program at NMTC, and his continued support and input will be essential to insure that this program maintains the integrity needed for future employees of the pulp and paper industry.

Eugene McCluskey currently serves as the Tech Prep Coordinator at Northern Maine Technical College for the Northern and Eastern Maine Tech Prep Consortium. He taught Industrial Arts for 24 years in the middle school and high school in Presque Isle, Maine, and high school in Biddeford, Maine. Also, he was a construction mechanic and instructor in the US Navy Seabees. Mr. McCluskey was also President of the Technology Education Association, Maine, a presenter at the League for Innovations, "Workforce 2000", New Orleans, LA and recipient of Maine's Outstanding Business/Education Partnership from Region 1 of the American Vocational Association.

WORKSHOP 3 ***Vermont Employer/Teacher Internship Program***

Robin Morton is the Executive Director of the Vermont Chamber of Commerce Business-Education Partnership (VCCBEP). VCCBEP was the first non-profit sponsored by a Chamber of Commerce in the United States. Robin's background is in special education and entrepreneurship. She has worked the last five years in VCCBEP connecting Vermont businesses with schools in a variety of ways. Robin is also an approved STW Technical Assistance Provider.

Albert Zielenski, who developed the Pre-Engineering Technology Program at River Bend Career & Technical Center in Bradford, Vermont, has an undergraduate engineering degree from Cornell University and a M.Ed. in Secondary Education. He worked for 15 years as an electronics and software engineer before becoming a teacher.

WORKSHOP 4 ***Innovation and Imagination: Advancing the Virtual Classroom in Rural New England***

Yvonne Damborg is the Executive Director of the Maine Advisory Council on School-to-Work Opportunities. A former teacher at the junior high, high school and university levels, she is also the technical assistance and marketing coordinator for Maine's School-to-Work initiative.

Kathleen Flynn, working with the Massachusetts Office for School-to-Work Transition Team as the Director of Partnership Development, assists in the coordination of capacity-building efforts for key state, regional and local stakeholders to organize, design and deliver appropriate school-to-work program and systems activities across the Commonwealth. Ms. Flynn is a lead member on several state and national task force efforts on school-to-work, including the National Health Science Career Path Development Project, the Statewide At-Risk and Out-of-School Youth Steering Committee, Massachusetts Transition Initiative and others. Ms. Flynn is a graduate of the University at Albany, where she worked as an Education Specialist with the SUNY Nelson A. Rockefeller College of Public Affairs and Policy.

Richard Nastri has been the Dean of Social Sciences, Health and Human Services and External Programs at Cape Cod Community College since 1994. His primary responsibilities include the administration and supervision of the Division's faculty, professional and support staff. Specific duties include serving as the chief administrative officer of the Division; encouraging excellence in teaching and professional growth; encouraging strong interaction among division faculty and staff, and implementing all components of appropriate collective bargaining agreements. Other duties include assisting department chairs in developing, maintaining and evaluating curricula. Dean Nastri is also responsible for the management and implementation of the following external programs: School-to-Careers, Tech Prep, Project Forward, Center for Graduate Education, Community Leadership Institute and Academy for Lifelong Learning.

WORKSHOP 5 ***New York Wired: Connecting Schools***

Jeffrey Perlee was appointed Director of the New York State Division of the Lottery by Governor George. E. Pataki in June of 1995. The New York Lottery is the largest and most profitable lottery in the United States. Before his appointment as Lottery Director, Mr. Perlee served as General Counsel of the Illinois Lottery. Prior to this position, he was an attorney with the Chicago firm of Sidley & Austin. He has served as Counsel to the Inner-City Teaching Corps. He serves as Co-Chairperson of the Empire State Winter Games in Lake Placid, NY, and is a member of the Capital-Saratoga Park Commission. Mr. Perlee is a native of Altamont, NY. He graduated from Hobart College with a degree in History and Political Science and from Duke University with a JD degree.

WORKSHOP 6 ***School-to-Work Risk Management***

Gregg Meyer is currently a regional coordinator for the Vermont School-to-Work Initiative. He graduated with a BS from Cornell University's School of Industrial and Labor Relations and a JD from Vermont Law School where he focused on labor and employment law as well as low income advocacy. After graduating from law school, Gregg worked as a staff attorney for the South Royalton Legal Clinic where he represented youth in a variety of legal situations as well as supervised law students studying the general practice of law. After his grant-funded position ended at the Clinic, Gregg worked as the assistant to the director of the Randolph Community Development Corporation, a community non-profit organization focusing on downtown and economic revitalization efforts. Due to his legal background and interest in providing safe and effective work-based learning experiences for all students, he immediately got involved with local, state and national efforts to develop a comprehensive risk management protocol for STW.

June VanHouton works for the Bradford Area Workforce Investment Board as the In-School, School-to-Work Coordinator at Blue Mountain Union School in Wells River, Vermont. Additionally, she coordinated an Education for Youth Employment program at Hazen Union School in Hardwick, Vermont for four years. Presently she is serving on the Risk Management Committee of the Vermont Work-Based Learning Manual writing effort. June brings an "in the trenches" perspective of how to research, address and solve risk management issues related to school-to-work activities.

Greg Voorheis is Vermont's Statewide STW Grant Manager. He chairs Vermont's STW Risk Management Committee and the National STW Risk Management Workgroup. Recently he presented the workgroup's paper at the national meeting of state STW Directors, October 1997. Greg has worked in employment and training for 18 years focusing on interagency efforts to serve the economically disadvantaged. He formerly taught in junior and senior high schools and at the college level in Nova Scotia, Canada. In the 70's he worked as a brokerage consultant for Connecticut General Life Insurance Company and has a broad understanding of STW insurance-related matters. He is currently helping write the soon-to-be published national technical assistance guide on STW risk management.

WORKSHOP 7 ***Building Business Awareness In Rural New York***

Robert Drake has been Superintendent of Schools in Berne-Knox-Westerlo Central School District since 1983, and now has been Superintendent of Schools in the Capital Region BOCES longer than any other superintendent. He has served as a member of the Statewide School-to-Work Advisory Council. He is the Chairperson of the Capital Region School-to-Work Planning Grant Committee, Chairperson of the Schoharie Area Superintendent's Association and he was the first Chairperson of the Southern Rural Albany County School and Human Services Coordinating Council. Mr. Drake has been in

the field of education for 29 years starting his career as a Social Studies teacher in the Guilderland School District in 1969.

Candace Huber is the Executive Specialist of the Erie 2 BOCES School and Business Alliance since 1991. Additionally she is the Southern Chautauqua County STW Coordinator since 1995. Previous to that, Ms. Huber held the position of Executive Director of the Youth Bureau for 11 years in Jamestown, NY.

Betty Powers is the Coordinator for GLOW School-to-Work Partnership. Prior to that, Ms. Powers served as the Director of the Wyoming County Business Education Council for ten years. This was one of the first business school collaborative efforts in the area and it was necessary to develop a format for dialogue and programs. For the next four years, she served as the Area Manager for the GLOW Private Industry Council. There Ms. Powers worked primarily with the businesses in monitoring programs to assure that training met the needs of local employers. Working with school-to-work allows Ms. Powers to continue to develop programs to ease the transition from education to employment and make it positive for both students and employers.

Kris Reuland, as School-to-Work Specialist, has been involved in career education initiatives in Elmira, Chemung County and the Chemung-Schuyler STW Partnership since 1986. In association with the Career Development Council, Ms. Reuland develops career education programs including career internships, integrated/applied curriculum, and workplace simulation. She is an integral member of the team that planned and is implementing the Elmira School-to-Work system. Ms. Reuland is a certified mathematics teacher and has worked in the industry.

Jean Stevens currently serves as Assistant Commissioner for Workforce Preparation and Continuing Education in the New York State Education Department. Responsibilities of this position include the leadership and oversight for EVEN START, Family and Adult Education, Adult and Secondary Vocational and Technical Education, Incarcerated Youth, Tech Prep, School-to-Work opportunities, Occupational Education Curriculum and Assessment, administration of the High School Equivalency Program, State Directorship of Vocational and Technical Education and Adult Education. Additional responsibilities include co-chair of the School-to-Work Advisory Council, agency lead for Welfare Reform and work with the Department of Labor on the development of a Workforce Delivery System. Prior to assuming this position, Ms. Stevens served as a Regional Education Coordinator for the Central and Western Regions of New York State. Ms. Stevens holds a BS and MS in Education in Home Economics Education and an MS in Education in Educational Administration.

WORKSHOP 8 ***School-to-Work Transition: Developing Collaborative Partnerships for the Inclusion of Students with Disabilities at the State, County and Local Level***

Lucy Ely-Pagan is a Staff Associate (Educational Consultant) at the Northeast Regional Resource Center (NERRC), located at Trinity College, Burlington, Vermont. NERRC is one of six centers funded by the US Department of Education, Office of Special Education Programs (OSEP) to deliver technical assistance related to special education issues to state departments of education in the Northeast region. Ms. Ely-Pagan began her career as a rehabilitation counselor, Vocational Rehabilitation Administration, in San Juan, Puerto Rico where she is from. Ms. Ely-Pagan's current responsibilities at NERRC include providing technical assistance in the areas of Transition, Cultural & Linguistic Diversity, Schools and Families Collaboration and School-to-Work issues. As such, she has worked in collaboration with the National Transition Alliance (NTA), National Transition Network (NTN), Vermont School-to-Work Opportunities, and with other Northeast states in supporting the inclusion of youth with disabilities in school-to-work activities.

John Grover is a Program Specialist in the Office of School-to-Career and College Initiatives, New Jersey Department of Education, with responsibility for the transition project, six local school-to-career projects and seven vocational student organizations' statewide leadership and services contracts. He has been a member of the state staff in vocational education since 1973. He previously served as the state advisor for FFA, HOSA, VICA, and DECA. Trained as a teacher of agriculture and FFA advisor, he has had experience with work-based education and entrepreneurship, personal and leadership development and competency assessment.

Bob Haugh is the Project Director of the New Jersey Partnership for Transition from School to Adult Life, a federally-funded system change grant. The New Jersey Partnership for Transition Project is a collaborative project to develop, implement, and improve transition systems to help youth with disabilities move from school to adult roles. His role as Project Director is to ensure that students with disabilities are included in the workforce development and school reform efforts. Bob spent four years working at Temple University's Center for Research in Human Development Education where his responsibilities included technical assistance and training for supported employment and transition. He has also worked as a project director for a community-based organization serving adults with severe disabilities in community living and community integrated employment programs.

Nancy Lauria is an Associate with the New York State Education Department, Office of Vocational and Educational Services for Individuals with Disabilities (VESID), Special Education Policy Unit. In this position she is the VESID liaison on school-to-work and coordinates the school-to-work activities of the transition coordination sites. She has worked in the areas of transition and school-to-work for students with disabilities over the past twelve years.

Kerry McKenna is the Coordinator for the Hudson Valley Transition Coordination Site, at the Southern Westchester BOCES.

WORKSHOP 9 ***School-to-Career: Project-Based Learning - A Teacher Friendly Workshop***

Ronald Millican has worked under federal and state grants as School-to-Career Coordinator in Newport and Warwick and is currently the School-to-Career Coordinator for the West Bay Education Collaborative that encompasses seven separate school districts. Mr. Millican also serves on the Rhode Island School-to-Career Regional Partnership Steering Committee. As a former investment banker and classroom teacher in New York City, he is able to combine his corporate and educational experience in designing projects that will help students make an easier transition from school to career.

WORKSHOP 10 ***Connecting Learning and Work: Roles and Leadership for Higher Education***

Judy Nelson is affiliated with the Itasca Community College in Minnesota and has been working closely with the Education Commission of the States on issues related to higher education.

Danial Via is a Research Associate for the Education Commission of the States on higher education issues. Before joining ECS, Mr. Via worked for the Western Interstate Commission for Higher Education, the Iowa Board of Regents and as a counselor in a community college. Aside from a degree in counseling, he has garnered degrees in higher education, journalism and public affairs.

Lee Williams is the Director of Science and Technology Research as well as the Director of the Oklahoma EPSCoR for the Oklahoma State Regents for Higher Education. After receiving his BSc. in Math and Physics and his Ph.D. in Geography from the University of Bristol in England, he worked for the University of Kansas and the University of Oklahoma. While in Oklahoma he served as the University's Associate and Interim Dean of Geosciences. In addition to his involvement with the ECS postsecondary project, Mr. Williams continues to advise graduate students and chair graduate student committees.

Jan Wilson is affiliated with Minnesota Colleges and Universities and has been working closely with the Education Commission of the States on issues related to higher education.

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And special appreciation to the 200 state and local leaders and policy makers; parents and students; school districts and communities; colleges, universities and community colleges; and employers and business leaders who participated in this conference.

Additional Resources

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SCHOOL TO WORK OPPORTUNITIES

U.S. DEPARTMENT OF EDUCATION U.S. DEPARTMENT OF LABOR

School-to-Work GLOSSARY OF TERMS

The National School-to-Work Office

400 Virginia Avenue, SW, Room 210

Washington, DC 20024

The School-to-Work Glossary of Terms was developed by state grantees, the National School-to-Work Office, and MPR Associates.

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To order a copy, contact the National School-to-Work Learning & Information Center at 400 Virginia Avenue, SW, Room 210, Washington, DC 20024,

(800) 251-7236.

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Introduction

School-to-Work (STW) is a new approach to learning in America's schools that links students, schools and workplaces. Locally-driven and community-based, it is an effort to reform education that combines high-level academic achievement with a graduated understanding of the world of work. A new way of preparing young people for their ultimate entry into the workplace, STW also encourages schools at secondary and postsecondary levels to develop school-to-Work systems cooperatively - together with employers, unions, civic groups, and other public and private sector organizations.

Enacted into federal legislation in 1994, the School-to-Work Opportunities Act provides venture capital to states and communities that compete to bring school-to-work into their neighborhoods. The Act is jointly funded by the U.S. Departments of Labor and Education. As school-to-work systems emerge throughout the country, we believe a "common language" may help to describe the elements that comprise them. The School-to-Work Glossary of Terms offers a reference point to a multi-faceted and highly decentralized movement. Like the effort of the local partnerships that bring school-to-work into communities, the glossary's definitions are the result of an intense collaboration between State STW coordinators and their stakeholder colleagues.

Where available, we pulled definitions from the Act. Generally, however, most definitions derived from the meanings the terms have acquired through use. The more complex definitions are illustrated with examples.

JD Hoye

Director, National School-to-Work Office

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Glossary of Terms	
Adopt-a-School	International Benchmarks
All Aspected of Industry	Internships
All Students	Job Rotation
Apprenticeship (Registered)	Job Shadowing
Basic Skills	Labor Market Area
Benchmarking	Learning Objectives, Performance Measures & Performance Standards
Block Scheduling	Limited-English Proficiency
Career Academy	Local Educational Agency
Career Awareness	Local Partnership
Career Days/Career Fairs	Mentors
Career Development	National Skill Standards Board
Career Exploration	Nontraditional Occupation & Employment
Career Exposure	Occupational Cluster
Career Guidance & Counseling	On-the-Job Training
Career Major/Pathway	Portfolio
Career Map	Post-secondary Educational Institution
Clinical Experiences	Private Career School (Proprietary School)
Compact	SCANS (Secretary's Commission on Achieving Necessary Skills)
Connecting Activities	School-Sponsored Enterprise
Consortium	School-to-Work Coordinator
Contextual Learning	School-to-Work Opportunities Program
Cooperative Education	School Tutors
Curriculum Alignment	Secondary School
Disability	Service Learning
Dropout	Skill Certificate
Dual Enrollment	Skill Standard
Elementary School	State Educational Agency
Entrepreneurial Projects	Team-Teaching
General Track	Tech Prep
Goals 2000	Technical Education
High Performance Workplace	Thinking Skills
High School Completion	Vocational Education
Integrated Curriculum	Work-Based Learning
	Youth Apprenticeship

Adopt-A-School

When a company or community organization adopts-a-school, it connects with a particular school, group of schools, or school district to improve the quality of education services. Participation typically takes the form of fiscal, material, or human resource contributions. Adopt-a-school efforts may take a number of different forms, including:

- ¥equipment donations
- ¥office supplies
- ¥speakers
- ¥mentors and tutors
- ¥receptions & parties
- ¥seminars
- ¥letters of support
- ¥scholarships and grants
- ¥company tours

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All Aspects of Industry

As defined by the School-to-Work Opportunities Act, the term "all aspects" of an industry refers to "all aspects of the industry or industry sector a student is preparing to enter, includito "all aspects of the industry or industry sector a student is preparing to enter, including planning, management, finances, technical and production skills, the underlying principles of technology, labor and community issues, health and safety issues, and environmental issues related to such industry or industry sector." All aspects also includes the array of o

The National Health Care Skill Standards Project has identified four broad clusters of health care industry occupations: (1) the therapeutic cluster provides treatment over time; (2) the diagnostic cluster creates a picture of health status; (3) the information services cluster documents and processes information; and (4) the environmental cluster creates a therapeutic and supportive environment.

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All Students

As defined in the Act, the term "all students" means "both male and female students from a broad range of backgrounds and circumstances, including disadvantaged students, students with diverse racial, ethnic, or cultural backgrounds, American Indians, Alaska Natives, Native Hawaiians, students with disabilities, students with limited-English proficiency, migrant children, school dropouts, and academically talented students."

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Apprenticeship (Registered)

Registered apprenticeship describes those programs that meet specific federally approved standards designed to safeguard the welfare of apprentices. The programs are registered with the Bureau of Apprenticeship and Training (BAT), U.S. Department of Labor, or one of 27 State Apprenticeship Agencies or Councils approved by BAT. Apprenticeships are relationships between an employer and employee during which the worker, or apprentice, learns an occupation in a structured program sponsored jointly by employers and labor unions or operated by employers and employee associations.

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Basic Skills

Basic skills are essential academic and personal abilities that are necessary for success in school and the workplace. Traditionally referred to as the three R's - reading, writing, an arithmetic - in recent times, the term has been expanded by both educators and employers to include a number of cognitive and interpersonal abilities, including the capability to think and solve problems, to communicate information in oral, written, and electronic forms, to work effectively alone and in teams, and to take responsibility for one's own development.

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Benchmarking

Benchmarking is the continuous process of measuring products, services, and practices against strong competitors or recognized leaders. It is an on-going activity, intended to improve performance; it can be applied to all facets of operations; it requires a measurement mechanism so that the performance "gap" can be identified; and it focuses on comparing best practices among enterprises that may or may not be alike.

Students at Socastee High School in Myrtle Beach, SC, take mathematics and science classes that are benchmarked to world standards. To set benchmarks, teachers meet with employers and educators at other schools, visit local business and industries, and use guidelines from organizations such as the National Council of Teachers of Mathematics. All students at the school take four years of mathematics, although only three are required for graduation. Science courses clearly describe what students are expected to know. The goal of the benchmarking initiative is to help prepare students for the next level by helping them judge their current progress.

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Blocking Scheduling

Block scheduling is a means of reconfiguring the school day. The traditional school day is typically divided into six or seven classes, each lasting from 45 to 55 minutes. With few exceptions, classroom instruction begins and ends within the allotted time period. Blocked courses may be scheduled for two or more continuous class periods or days to allow students greater time for laboratory or project-centered work, field trips or work-based learning, and special assemblies or speakers.

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Career Academy

A career academy is typically a school-within-a-school that offers students academic programs organized around broad career themes. Often integrating classroom instruction with work-based learning, academies try to equip students with the necessary skills for both workforce entry and postsecondary admission. Staffed by a team of teachers from various disciplines, academy classes are usually block scheduled and smaller than those in the typical high school to build students's sense of membership in the academy community. Curricula are often planned with the assistance of business partners, who suggest program structure, provide classroom speakers, host school field trips, and provide mentors for individual students. Students may be placed in jobs related to their field of study in the summer, and may spend some part of their senior year participating in a work experience program.

The Academy for Law, Criminal Justice, and Public Administration, based in Horace Furness High School in South Philadelphia (Philadelphia, PA), offers secondary students concentrated studies in the legal, governance, and criminal justice systems. To help students integrate their academic coursework, classes focus on year-long projects that explore a specific legal issue. For example, in studying the topic of DNA for trial purposes, students might conduct statistical analyses of its structure for math, analyze its composition for chemistry, and write a research paper on its discovery for English. Periodic guest speakers, mock trials, role-playing sessions, and trips to law firms in the area lend context to classroom instruction.

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Career Awareness

Career awareness activities generally take place at the elementary level. They are designed to make students aware of the broad range of careers and/or occupations in the world of work, including options that may not be traditional for their gender, race or ethnicity. Career awareness activities range from limited exposure to the world of work, through occasional field trips and classroom speakers, to comprehensive exposure. The latter may involve curriculum redesign, introduction of students to a wide span of career options, and integration with activities at the middle school level.

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Career Days/Career Fairs

Career day activities are designed to help students think about their interests and abilities in relation to potential careers, and to meet people who can assist them in getting the necessary skills and experience for workforce success. Special events are typically held to allow students to meet with postsecondary educators, employers, employees, or human resource professionals to learn about education and work opportunities. Information may be distributed through brochures that students receive from visiting firms or school representatives, via formal or informal discussions held in the classroom, or during tours of a business or college.

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Career Development

Career development is the process through which an individual comes to understand his or her place in the world of work. Students develop and identify their careers through a continuum of career awareness, career exploration, and work exposure activities that helps them to discern their own career path. Career development encompasses an individual's education and career related choices, and the outcome of those choices.

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Career Exploration

Career exploration generally takes place at the middle school level and is designed to provide some in-depth exposure to career options for students. Activities may include the study of career opportunities in particular fields to identify potential careers, writing individual learning plans that dovetail with career majors offered at the high school level, or review of local labor market information.

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Career Exposure

Career exposure can be defined as activities at the high school level that provide actual work experience connecting classroom learning to work.

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Career Guidance & Counseling

As defined in the Act, the term "career guidance and counseling" means, "programs - (A) that pertain to the body of subject matter and related techniques and methods organized for the development in individuals of career awareness, career planning, career decision-making, placement skills, and knowledge and understanding of local, State, and national occupational, educational, and ongoing market needs, trends and opportunities; (B) that assist individuals in making and implementing informed educational and occupational choices; and (C) that help students develop career options with attention to surmounting gender, race, ethnic, disability, language or socioeconomic impediments to career options and encouraging careers in nontraditional employment."

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Career Major/Pathway

As defined in the Act, the term "career major" means "a coherent sequence of courses or field of study that prepares a student for a first job and that - (A) integrates academic and occupational learning, integrates school-based and work-based learning, and establishes linkages between secondary schools and postsecondary institutions; (B) prepares the student for employment in a broad occupational cluster or industry sector; (C) typically includes at least 2 years of secondary education and at least 1 or 2 years of postsecondary education;

(D) provides the students, to the extent practicable, with strong experience in and understanding of all aspects of the industry the students are planning to enter; (E) results in the award of a high school diploma or its equivalent; a certificate or diploma recognizing successful completion of 1 or 2 years of postsecondary education (if appropriate); and a skill certificate; and (F) may lead to further education and training, such as entry into a registered apprenticeship program, or to admission to a 2- or 4-year college or university."

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Career Map

A career map is a written plan of study that helps students select a coherent sequence of secondary (and where appropriate, postsecondary) courses and experiences to prepare them for college entry or work in a selected career cluster or area. Career maps are particularly valuable for entering high school freshmen, because they can provide them with the direction they need in scheduling their course of study in their career of choice.

Entering students at Roosevelt High School in Portland, OR, complete a "Freshman Focus" class that emphasizes career exposure activities. Students first rotate through each of the career clusters offered in the school, as well as receive life skills, self-esteem building, and group work skill instruction. Just prior to entering tenth grade, students draft career maps that identify a specific career pathway in which they will anchor their future academic studies. Mapping activities involve designing a career-related academic curriculum for the tenth, eleventh, and twelfth grades that may lead to advanced certification. Introductory courses in the sophomore year give way to more specialized coursework in the later grades. Learning programs include structured work-based placements that are guided by training plans.

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Clinical Experiences

Clinical experiences are school- or work-based placements in which students are taught academic and occupational skills from school or employee instructors who supervise and evaluate their work. School-based clinical experiences typically expose students to situations and settings they might encounter once they enter their profession. Simulations and role-playing allow students to home their professional skills in school under the direction of a classroom teacher.

Work-based clinical experiences offer students real-life activities in a professional setting. These experiences, offered under the direction of a practicing employee, are designed to help students learn the skills and attitudes necessary to become a competent practitioner. Both students and clinical instructors are typically supervised by school-based coordinators or intermediary organizations who monitor placements to ensure that appropriate instruction occurs. Students successfully completing a clinical experience program may qualify for industry certification or may receive credits that they may apply toward a professional degree.

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Compact

Compacts are contracts among community leaders to work to initiate and sustain local educational reform.

Compact representatives may include community decision makers, school superintendents, college presidents, and heads of business organizations as well as principals, teachers, parents, and unions. Compacts provide a structure of mutual accountability because all participants agree to work together and separately to support group goals. Efforts on the part of compact members may include creating employment opportunities for students, helping to restructure educational systems, and providing local labor market information.

The Boston Compact (Boston, MA) was formed in 1982, when business leaders who felt that they could help raise the quality of high school graduates approached local authorities and educators with a proposal for school reform. In exchange for district-wide improvements in student academic performance and a reduction in the total dropout rate, business leaders promised to increase jobs and college assistance to high school graduates. Renegotiated twice since 1982, the most recent agreement in 1994 instituted new six-year goals:

(1) Easing students' transition to employment and higher education;

(2) Reorganizing traditional educational administrative and governance structures;

(3) Designing comprehensive curriculum, standards, and assessment methods;

(4) Providing teachers with training and professional development opportunities;

(5) Offering programs that help parents to support their children from birth to school; and

(6) Creating community learning centers using school facilities.

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Connecting Activities

Connecting activities are programs or human resources that help link school- and work-based educational programs in the manner described in the School-to-Work Opportunities Act. Connecting activities include:

(1) matching students with work-based opportunities;

(2) using school site mentors as liaisons between educators, business, parents, community partners;

(3) providing technical assistance to help employers and educators design comprehensive STW systems;

(4) providing technical assistance to help teachers integrate school and work-based learning as well as academic and occupational subject matter;

(5) encouraging active business involvement in school- and work-based activities;

(6) assisting STW completers in finding appropriate work, continuing their education or training, and linking them to other community services;

(7) evaluating of post-program outcomes to assess program success, particularly with reference to selected populations ; and

(8) linking existing youth development activities with employer and industry strategies to upgrade work skills.

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Consortium

In reference to school-to-work, a consortium is a group of two or more agencies that enter into a cooperative agreement to share information or provide services that benefit students. Participating groups may pool their individual fiscal, human, and material resources to take advantage of economies of scale, or arrange to share staff technical expertise. Consortia may be formed within educational sectors, as when a number of secondary schools collaborate to offer advanced instructional services, or across educational sectors, as when a secondary and postsecondary institution arrange articulated programs. Employer and community organizations may also join educational consortia, or form their own consortia, to support School-to-Work system building efforts.

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Contextual Learning

Contextual knowledge is learning that occurs in close relationship with actual experience. Contextual learning enables students to test academic theories via tangible, real world applications. Stressing the development of "authentic" problem-solving skills, contextual learning is designed to blend teaching methods, content, situation, and timing.

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Cooperative Education

Cooperative education is a structured method of instruction whereby students alternate or coordinate their high school or postsecondary studies with a job in a field related to their academic or occupational objectives. Students and participating businesses develop written training and evaluation plans to guide instruction, and students receive course credit for both their classroom and work experiences. Credit hours and intensity of placements often vary with the course of study.

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Curriculum Alignment

Curriculum alignment is when academic and vocational curricula are linked so that course content and instruction dovetail across and/or within subject areas. Curriculum alignment may take two forms: horizontal alignment, when teachers within a specific grade level coordinate instruction across disciplines, and vertical alignment, when subjects are connected across grade levels, in a cumulative manner, to build comprehensive, increasingly complex instructional programs.

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Disability

The 1990 Americans with Disabilities Act defines individuals with disabilities as including any individual who: (1) has a physical or mental impairment that substantially limits one or more of the major life activities of that individual; (2) has a record of an impairment described in paragraph (1); or (3) is regarded as having an impairment described in paragraph (1). This definition includes any individual who has been evaluated under Part B of the Individuals with Disabilities Education Act and determined to be an individual with a disability who is in need of special education and related services; and any individual who is considered disabled under section 504 of the Rehabilitation Act of 1973. At the secondary level, counts of disabled students are typically based on whether a student has an Individual Education Plan (IEP). At the postsecondary level, counts of disabled students are typically based on student self-reports of disabling conditions.

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Dropout

The term dropout refers to an event, such as leaving school before graduating; or a status, such as individual who is not in school and is not a graduate. A person who drops out of school may later return and graduate. At the time the person has left school, he/she is called a dropout. At the time the person returns to school, he/she is called a stopout. Measures to describe these behaviors include event dropout, status dropout rate, and high school completion rate.

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Dual Enrollment

Dual enrollment is a program of study allowing high school students to simultaneously earn credits toward a high school diploma and a postsecondary degree or certificate. Written agreements formalize programs of study, the transfer of academic and vocational credits among institutions, and the role of secondary and postsecondary instructors.

High school students in Norfolk, VA, can earn postsecondary credits at nearby Tidewater Technical College for selected occupational coursework. Student participation can begin as early as sophomore year in high school or when a student first enrolls in a high school vocational-technical course that is articulated with the local college's offerings. Students take both academic and vocational courses at the high school in the morning, then additional vocational courses at the college in the afternoon. Students receive college credit for their high school work after graduating from high school, enrolling at Tidewater College, and

completing 12 credit hours of study in their articulated program area.

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Elementary School

An elementary school is an agency that is both classified as elementary by state and local practice, and is composed of any span of grades not above grade eight. A preschool or kindergarten school is included under this heading only if it is an integral part of a elementary school or a regularly established school system.

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Entrepreneurial Projects

Entrepreneurial projects provide opportunities for school-age youth to assess, design, and operate business and community service activities.

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General Track

The general track is characterized by a broadly defined curriculum that is less rigorous in nature than the academic and the vocational track. General programs of study prepare students for neither college nor the workforce.

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Goals 2000

The Goals 2000 Act provides resources to states and communities to develop and implement educational reforms aimed at helping students master academic and occupational skill standards. By providing flexible and supportive options for coordinating, promoting, and building a system of educational standards to improve education, the Act aims to make the Federal government a better partner in comprehensive state and local school improvement efforts.

Signed into law March 31, 1994, the federal legislation provides a framework for achieving eight National Education Goals by the year 2000. These goals are:

1) School Readiness - all children will start school ready to learn.

2) School Completion - the high school completion rate will increase to at least 90%.

3) Student Achievement and Citizenship - all students leaving grades 4, 8, and 12 will demonstrate competency over challenging academic subjects and have skills that will enable them to function in a democratic society.

4) Teacher Education and Professional Development - increase professional development opportunities and raise the instructional knowledge and skills of the nation's teaching force.

5) Mathematics and Science - build student math and science achievement to be first in the world.

6) Adult Literacy and Lifelong Learning - make every adult American literate and equip them with the knowledge and skills to compete in a global economy and exercise their citizenship responsibilities.

7) Safe, Disciplined, and Alcohol - and Drug-Free Schools - offer a disciplined environment conducive to learning in every school, free of drugs, violence, and unauthorized firearms and alcohol.

8) Parental Participation - increase parental participation in promoting the social, emotional, and academic growth of children.

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High Performance Workplace

A workplace that employs sophisticated, technically advanced and efficient production techniques. In order for this type of workplace to function, workers must be equipped with advanced thinking and occupational skills that enable them to learn on the job, adapt to rapidly changing technology, and work in teams to solve problems. In addition to their economic development potential, high performance workplaces may help drive school reform by providing educators with a set of occupational skill standards that are required for marketplace success.

Employees of the Ritz-Carlton hotel chain, one such high-performance workplace, must successfully complete a Training Certificate to learn how to perform to the standards in their position. Hallmarks of the program include a comprehensive orientation followed by on-the-job training and job certification. Because of the nature of the industry, employees are expected to posses a number of high performance traits, including the ability to work together in teams, and to perform a wide variety of tasks.

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High School Completion

Most students complete high school by finishing the requisite secondary course work to receive a regular high school diploma. The total number of credits, courses, or Carnegie units that must be completed vary by state. In some cases, minimum requirements for high school completion are legislated statewide, in others it is left to local districts to determine minimum course and content standards. A relatively small number of students may complete high school by receiving an alternative high school credential, such as a General Education Development (GED) certificate, certificate of completion, or certificate of attendance. The term does not

distinguish how long it takes to achieve the high school credential.

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Integrated Curriculum

Integrated curriculum is when academic and occupational or career subject matter - normally offered in separate courses - are taught in a manner that emphasizes relationships among the disciplines. Integrated curriculum may take many forms, ranging from the simple introduction of academics into traditional occupational courses to comprehensive programs that organize all instruction around career major themes.

Students at Sussex Technical High School (Sussex County, DE) choose from four technology clusters: Automotive Diesel; Business; Health/Human Services; and Industrial/Engineering Technologies. Instruction within each cluster area emphasizes integrating academic and technical course work. For example, students in the Industrial/Engineering program study American history by preparing written outlines and oral presentations that document construction techniques used by colonists. As an activity students actually design and build replicas of colonial cabins and canoes.

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International Benchmarks

International benchmarks are measures of products, services, and practices. They set standards that American schools, companies, students, and workers can use to compare their achievements with those of foreign partners and competitors.

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Internships

1. Student internships are situations where students work for an employer for a specific period of time to learn about a particular industry or occupation. Students' workplace activitietime to learn about a particular industry or occupation. Students' workplace activities may include special projects, a sample of tasks from different jobs, o

2. Teacher internships are work-site experiences of at least two weeks in duration for teacher. During this time, teachers may work at a particular job at the firm to learn specific skills, or rotate throughout the firm to learn all aspects of the industry in which they are employed. This may or may not include financial compensation.

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Job Rotation

Job rotation is when workers periodically transfer among a number of different positions and tasks that require different skills and responsibilities. Among the reasons employers rotate job tasks is to help workers understand: the different steps that go into creating a product and/or service delivery; how their own effort affects the quality and efficiency of production and customer service; and, how each member of the team contributes to the process. Job rotation may require that employees possess a wide range of general and specific skills and that they undergo advanced training to enable them to perform a variety of work functions.

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Job Shadowing

Job shadowing is typically a part of career exploration activities in late middle and early high school. A student follows an employee at a firm for one or more days to learn about a particular occupation or industry. Job shadowing can help students explore a range of career objectives and select a career major for the latter part of high school.

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Labor Market Area

As defined by the U.S. Bureau of Labor Statistics, a labor market area is "an economically integrated geographic area within which individuals can reside and find employment within a reasonable distance, or can readily change employment without changing their place of residence." Labor markets are classified as either metropolitan or non-metropolitan (small labor market) areas. In 1994, a total of 2,378 labor market areas were identified: 329 metropolitan areas, and 2,049 non-metropolitan areas. Labor market areas are identified in order to standardize and promote comparability for the collection and use of labor force information in administering various government programs. Areas are reevaluated and updated every 10 years using the latest Decennial Census information.

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Learning Objectives, Performance Measures and Performance Standards

Educators sometimes develop performance measurement systems to assess student achievement, monitor school progress, and support program improvement. The terms learning objectives, performance measures, and performance standards are used to define each part of the three-part process of establishing a performance measurement system. The process begins with identifying learning objectives for students or other program participants. After identifying these objectives, it is then necessary to decide how to measure their attainment. After developing appropriate performance measures, standards must then be set to represent the level of performance that is desired. The three terms are defined below:

1. **Learning Objectives:** Summarize the knowledge, skills, and abilities that students will be expected to achieve. A learning objective answers the question, "What do we want students to know, understand, or be able to do?"

2. **Performance Measures:** Describe how attainment of the learning objectives will be measured or assessed. Performance measures typically rely on standardized tests, performance assessments, surveys, or other methods of documenting and quantifying performance. A performance measure answers the question, "How will we measure attainment of the learning objectives?"

3. **Performance Standards:** Set the level of knowledge or skill mastery that students or schools will be expected to attain. Performance standards define the minimum acceptable level of achievement on the performance measures for each learning objective. A performance standard answers the question, "How much is enough?"

Learning objectives, performance measures and performance standards can be developed for individuals as well as entire districts, schools, or programs. The following table illustrates how this might be done in the area of mathematics achievement.

	Student Level	District, School, or Program Level
1. Learning Objective "What?"	Student will attain mathematics Same proficiency as identified for his or her grade level	Same
2. Performance Measure "How?"	State mathematics achievement test score	Average score on the statemathematics achievement test
3. Performance Standard "How much?"	Student will score at or above grade level	At least 80 percent of students will score at or above grade level

Example of Learning Objectives, Performance Measures and Standards for Mathematics Achievement

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Limited-English Proficiency

The 1988 Bilingual Education Act describes a limited English proficient student as one who (1) meets one or more of the following conditions: (a) the student was born outside of the United States or whose native language is not English; (b) the student comes from an environment where a language other than English is dominant; or (c) the student is American Indian or Alaskan Native and comes from an environment where a language other than English has had a significant impact on his/her level of English language proficiency; and (2) has sufficient difficulty speaking, reading, writing, or understanding the English language to be denied the oppomeets one or more of the following conditions: (a) the st

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Local Educational Agency

A local educational agency (LEA) is a local level administrative unit that exists primarily to operate public schools or to contract for public school services. Its synonyms include "school district" and "local basic administrative unit."

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Local Partnership

As defined by the Act, "the term 'local partnership' means a local entity that is responsible for local School-to-Work Opportunities programs and that - (A) consist of employers, representatives of local educational agencies and local postsecondary educational institutions (including representatives of area vocational education schools, where applicable), local educators (such as teachers, counselors, or administrators), representatives of labor organizations or non-managerial employee representatives, and students; and (B) may include other entities, such as - employer organizations; community-based organizations; national trade associations working at the local levels; industrial extension centers; rehabilitation agencies and organizations; registered apprenticeship agencies; local vocational education entities; proprietary institutions of higher education...; local government agencies; parent organizations; teacher organizations; vocational student organizations; private industry councils...; federally recognized Indian tribes, Indian organizations, Alaska Native villages..., and Native Hawaiian entities."

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Mentors

1. A School Site Mentor is defined in the Act as, "a professional employed at a school who is designated as the advocate for a particular student, and who works in consultation with classroom teachers, counselors, related service personnel, and the employer of the student to design and monitor the progress of the School-to-Work Opportunities program of the student."

2. A Workplace Mentor is defined in the Act as, "an employee or other individual, approved by the employer at a workplace, who possesses the skills and knowledge to be mastered by a student, and who instructs the student, critiques the performance of the student, challenges the student to perform well, and works in consultation with classroom teachers and the employer of the student."

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National Skill Standards Board

Established under Title V of the Goals 2000: Educate America Act, the National Skill Standards Board serves as a catalyst to stimulate the development and adoption of a voluntary national system of skill standards, assessment, and certification of attainment criteria.

This system of skill standards is intended to increase the economic competitiveness of the United States by aiding:

¥industries in informing training providers and prospective employees of skill needs;

¥employers in evaluating skill levels of applicants and designing training for existing workers;

¥labor organizations in improving employment security and providing portable credentials;

¥workers in obtaining skill certification that enhances career advancement and job security;

¥students and entry level workers in identifying skill levels necessary for high wage jobs;

¥training providers and educators in determining appropriate training services; and

¥government in evaluating outcomes of publicly funded training programs.

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Nontraditional Occupation and Employment

As defined in the Women Apprenticeship and Nontraditional Occupations Act, the term nontraditional occupations refers to occupations and jobs in which women make up 25 percent or less of the total numbers of workers.

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Occupational Cluster

An occupational cluster is a grouping of occupations from one or more industries that share common skill requirements. Occupational clusters form the basis for developing national skill standards, organizing instruction in all aspects of an industry, establishing career academies, and creating career pathways or majors as part of school-to-work programs.

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On-the-Job-Training

On-the-job training is hands-on training in specific occupational skills that students receive as part of their workplace experiences.

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Portfolio

A portfolio is a collection of work that documents a student's educational performance over time. While there is no standard format that a portfolio must take, it typically includes a range of materials (e.g., reports, photographs) selected by the student. A brief introduction and summary statement may describe how the

portfolios was assembled and what was learned in the compilation process. Portfolio may be used for a variety of purposes, including: increasing student learning opportunities; helping student demonstrate a wide variety of skills; assisting students in recognizing their own academic growth; and teaching students to take greater responsibility for their own learning and development. Instructors report that the portfolio process can increase collaboration with students, provide an alternative means of observing students' cognitive and academic progress, help drive program improvement, and foster professional development by helping teachers to organize and manage their curriculum.

Since 1991, the State of Kentucky has required all students to develop writing and math portfolios. Portfolios are intended to exhibit a purposeful selection of work that highlights a student's academic achievement. For example, a Grade 12 Writing Portfolio must include a personal narrative or memoir, a short story, poem, or play; and three pieces of writing in which students predict an outcome, solve a problem, draw a conclusion, defend a position, explain a process, create a model, or analyze a situation. Teachers use completed projects to integrate performance assessment with instruction, to provide information for curriculum development, and to demonstrate gains in student achievement over time.

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Post-secondary Educational Institution

A postsecondary educational institution is a school that provides formal instructional programs with a curriculum designed primarily for students who have completed the requirements for a high school diploma or equivalency certificate. This includes programs of an academic, vocational and continuing professional education purpose, but excludes vocational and adult basic education programs.

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Private Career School (proprietary school)

As defined by the U.S. Department of Education, a proprietary institution is "an educational institution that is under private control but whose profits derive from revenues subject to taxation." Private career schools typically include postsecondary institutions that are independently owned and operated as a profit-making enterprise.

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SCANS (Secretary's Commission on Achieving Necessary Skills)

The Secretary's Commission on Achieving Necessary Skills (SCANS) was convened in February 1990 to examine the demands of the workplace and to determine whether the current and future workforce is capable of meeting those demands. The Commission was directed to: (1) define the skills needed for employment; (2) propose acceptable levels in those skills; (3) suggest effective ways to assess proficiency; and (4) develop a strategy to disseminate the findings to the nation's schools, businesses, and homes.

The Commission identified five competencies (i.e., skills necessary for workplace success) and three foundations (i.e., skills and qualities that underlie competencies).

¥**COMPETENCIES** - effective workers can productively use:

Resources - allocating time, money, materials, space, and staff;

Interpersonal Skills - working on teams, teaching others, serving customers, leading, negotiating and working well with people from culturally diverse backgrounds;

Information - acquiring and evaluating data, organizing and maintaining files, interpreting and communicating, and using computers to process information;

Systems - understanding social, organizational, and technological systems, monitoring and correcting performance, and designing or improving systems;

Technology - selecting equipment and tools, applying technology to specific tasks, and maintaining and trouble-shooting technologies.

¥**FOUNDATIONS** - competence requires:

Basic Skills - reading, writing, arithmetic and mathematics, speaking, and listening;

Thinking Skills - thinking creatively, making decisions, solving problems, seeing things in the mind's eye, knowing how to learn, and reasoning;

Personal Qualities - individual responsibility, self-esteem, sociability, self-management, and integrity.

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School-Sponsored Enterprise

A school-sponsored enterprise is an enterprise in which goods or services are produced by students as part of their school program. School-sponsored enterprises typically involve students in the management of a project that may involve the sale of goods for use by others. Enterprises may be undertaken on or off the school site but

are always part of the school's programs.

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School-to-Work Coordinator

Individuals assigned or hired to oversee and implement the require components of a school-to-work system, including school-based activities, work-based activities, and connecting activities. At the State level, school-to-work coordinators may be responsible for drafting a state plan; coordinating state efforts with other national and state legislation; organizing technical assistance, follow up, and placement assistance for STW stakeholders; and monitoring local partnership plans and activities.

At the local level, school-to-work coordinators may be involved in drafting local plans; recruiting and coordinating business partners; organizing technical assistance, follow up, and placement assistance for local STW stakeholders; and monitoring local partnership plans and activities for program improvement purposes. Coordinators must be knowledgeable of community resources; labor markets; school operations; and posses negotiation, team-building, leadership, and administrative skills.

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School-to-Work Opportunities Program

As defined in the Act, general requirements of a "School-to-Work Opportunities program" include:

¥integrated school-based and work-based learning that integrates academic and occupational learning and links between secondary and postsecondary education,

¥the opportunity for participating students to complete a career major,

¥the provision of a strong experience in and understanding of all aspects of the industry a student is preparing to enter, and

¥equal access for students to a full range of program components and related activities, such as recruitment, enrollment, and placement activities. However, these services are not offered as an entitlement.

In addition to general program requirements, a school-to-work program also must feature a school-based learning component, a work-based learning component, and a connecting activities component. At a minimum, these programs should include:

School-Based Learning Component

1. Career awareness and career exploration and counseling programs beginning at the earliest possible age, but not later than 7th grade;

2. Career major selection not later than the beginning of 11th grade;

3. A program of study that meets the academic standards the state has established for all students, including, where applicable, standards established under the Goals 2000 Act, and meets the requirements for postsecondary education preparation and skill certificate award;

4. A program of instruction and curriculum that integrates academic and vocational learning and incorporates instruction to the extent practicable, in all aspects of an industry;

5. Regular evaluations of students and dropouts to identify their academic strengths and weaknesses, workplace knowledge, goals, and need for additional learning opportunities; and

6. Procedures that ease student entry into additional training or post-secondary education programs, and that ease the transfer of students between education and training programs.

Work-Based Learning Component

1. Work experience opportunities;

2. Job training and work experiences coordinated with learning in school-based programs that are relevant to students' career major choices, and lead to the award of skill certificates;

3. Workplace mentoring;

4. Instruction and activities in general work place competencies, including positive work attitudes, employability, and practicable skills; and

5. Broad instruction, to the extent practicable, in all aspects of the industry.

Connecting Activities Component

1. Matching students with work-based learning opportunities of employers;

2. School-site mentors to act as liaisons among school, employer and community partners;

3. Technical assistance to small- and medium-sized firms and other parties;

4. Assistance to schools and employers in integrating school-based and work-based learning;

5. Encouraging active participation of employers in cooperation with local education officials;

6. Assistance to participants in finding jobs, continuing their education, or entering additional training and linking them with other community services to assure a successful transition;

7. Collecting and analyzing post-program outcomes of participants; and

8. Linking youth development activities in this Act with other employer and industry strategies.

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School Tutors

Individuals who work with students to help them understand topics or concepts that need reinforcement. Tutoring activities may take place during or after school or work, and may or may not be part of a structured school program. In addition to academic course work, tutors may work with students to address career or personal development issues. Tutors may be paid or unpaid.

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Secondary School

A school comprising any span of grades beginning with the next grade following an elementary or middle-school (usually 7, 8, or 9) and ending with or below grade 12. Both junior high schools and senior high schools are included.

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Service Learning

Service learning is an instructional method that combines community service with a structured school-based opportunity for reflection about that service, emphasizing the connections between service experiences and academic learning. Although most service-learning activities vary by educational purpose, most programs balance students' need to learn with recipients' need for service. Students benefit by acquiring skills and knowledge, realizing personal satisfaction and learning civic responsibility, while the community benefits by having a local need addressed.

Custer High School, a construction magnet located in Milwaukee, WI, seeks to equip youth with academic and technical skills that will prepare them for work and postsecondary education. As part of a unique service learning project, the school district has teamed with a local community development corporation to purchase and renovate boarded-up homes. Students produce cost estimates, analyze and design structures, and apply

advanced carpentry, plumbing and electrical skills that they learn in school. Remodeled homes are sold to low-income families living in the community at the lowest possible cost consistent with good business practice. A diploma and Career Certificate are awarded to students upon graduation.

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Skill Certificate

A skill certificate is a portable, industry-recognized credential that certifies the holder has demonstrated competency on a core set of content and performance standards related to an occupational cluster area. Serving as a signal of skill mastery at industry-benchmarked levels, skill certificates may assist students in finding work within their community, state, or elsewhere in the nation. When issued by a School-to-Work Opportunities Act program under an approved state plan, state-developed skill standards used for certification purposes must be at least as challenging as standards ultimately endorsed by the National Skill Standards Board.

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Skill Standard

A skill standard specifies the knowledge and competencies required to perform successfully in the workplace. Standards are being developed along a skill continuum ranging from (1) general work readiness skills, and (2) core skills or knowledge for an industry, to (3) skills common to an occupational cluster, and (4) specific occupational skills. Standards may cover basic and advanced academic competencies, employability competencies, and technical competencies. Development of these standards is tied to efforts to certify students' and workers' skills.

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State Educational Agency

As defined in the School-to-Work Opportunities Act, the term state educational agency means the "officer or agency primarily responsible for the state supervision of public elementary and secondary schools." In many states, a state board of education and/or chief state school officer supervises the operation of public schools. State board members are typically appointed by the governor, or elected by partisan or nonpartisan ballot. Chief state school officers (sometimes called state superintendents) are typically appointed by the state board, or elected by partisan or non-partisan ballot. A small number of states either rely solely on their state board of education or chief state school officer for educational governance.

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Team-Teaching

Team-teaching is when two or more instructors work together to design and teach curricula in multiple subjects that are presented to the same group of students. Merging teacher talents and knowledge of different disciplines

with new instructional materials can help students to better understand relationships across and within their educational programs. Participating instructors may choose to teach classes together, or may present material individually based on a commonly agreed format. To encourage material development, teachers typically share common planning periods so that they may work together to coordinate their subject matter, and participate in joint staff development programs.

The electronics and applied physics teachers at Alderdice High School (Pittsburgh, PA), for example, meet regularly to write curricula that dovetail across the two classes. Weekly planning sessions are used to develop instructional plans and design units that link across subjects. Moreover, the two teachers regularly visit each other's classes to demonstrate and explain how physics and electronics interrelate. For example, the physics teacher may come to the electronics class to describe the underlying principles upon which electricity is based, while the electronics teacher may share equipment and technical materials to provide applied context for academic concepts taught in physics class.

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Tech Prep

Tech Prep is the name given to programs that offer at least four years of sequential course work at the secondary and postsecondary levels to prepare students for technical careers. Programs typically begin in eleventh grade and result in an award of an associate's degree or certificate after two years of postsecondary training. Other Tech Prep combinations are also available, depending on local consortium arrangements. Tech Prep is designed to build student competency in academic subjects and to provide broad technical preparation in a career area. Course work integrates academic and vocational subject matter and may provide opportunities for dual enrollment in academic and vocational courses at secondary and postsecondary institutions.

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Technical Education

Technical education is a program of vocational instruction that prepares individuals for positions, such as draftsman or lab technician, in different occupational areas requiring a range of skills and abilities. Technical education typically includes the study of the sciences and mathematics underlying a technology, as well as the methods, skills, the materials commonly used and the services performed in the technology.

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Thinking Skills

Thinking skills are cognitive abilities used to organize, evaluate, and process information. According to the SCANS Report for America 2000, thinking skills may be disaggregated into six distinct categories that are found, to a varying extent, in many occupations.

1. Creative thinking - uses imagination freely, combines ideas or information in new ways, combines ideas or information in new ways, makes connections between seemingly unrelated ideas, and reshapes goals in ways that reveal new possibilities.

2. Decision making - specifies goals and constraints, generates alternatives, considers, risks, and evaluates and chooses best alternatives.

3. Problem solving - recognizes that a problem exists (i.e., there is a discrepancy between what is and what should or could be), identifies possible reasons for the discrepancy, devises and implements a plan of action to resolve it, evaluates and monitors progress, and revises plan as indicated by findings.

4. Seeing things in the mind's eye - organizes and processes symbols, graphs, objects or other information; for example, sees a building from a blueprint, a system's operation from schematics, or the flow of work activities from narrative descriptions.

5. Knowing how to learn - recognizes and uses learning techniques to apply and adapt new knowledge and skills in both familiar and changing situations and is aware of learning tools such as personal learning styles, and formal and informal learning strategies and information.

6. Reasoning - discovers a rule or principle underlying the relationship between two or more objects and applies it in solving a problem. Uses logic to draw conclusions from available information, extracts rules or principles form a set of objects or written text, applies rules and principles to a new situation, or determines which conclusions are correct when given facts.

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Vocational Education

As defined by the U.S. Department of Education, vocational education consists of "organized educational programs, services, and activities that are directly related to the preparation of individuals for paid or unpaid employment, or for additional preparation for a career that does no require a baccalaureate or an advanced degree." Secondary and postsecondary vocational course work is typically offered in three areas:

1. Consumer & homemaking education - courses intended to prepare students for roles outside the paid labor market. Topics include child care, meal preparation, nutrition, and household management.

2. General labor market preparation - courses that teach general employment skills without necessarily preparing students for paid employment in a specific field. Instruction includes introductory word processing, industrial courses, business education, and work experience and career exploration.

3. Specific labor market preparation - courses that teach skills and provide information required in a particular vocation. Areas of specific labor market preparation include: agriculture, business, marketing and distribution, health, occupational home economics (i.e., preparation for paid employment in the service sector), trade and industry, and technology and communication.

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Work-Based Learning

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Youth Apprenticeship

Youth apprenticeship is typically a multi-year program that combines school- and work-based learning in a specific occupational area or occupational cluster and is designed to lead directly into either a related post-secondary program, entry-level job, or registered apprenticeship program. Youth apprenticeships may or may not include financial compensation.

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CONNECTING LEARNING AND WORK:
The Rural Experience

Open Space Proceedings

Gideon Putnam Hotel
Saratoga Springs New York
November 17-18, 1997

School to Work

Issue: Linkages Between WTW & STW

Convenor: April Bender

Recorder: Robin White

Participants: Roster Attached

Discussion: Highlights of this conversation are presented in three sections--goals for the session, critical issues, and promising practices/strategies. Since everyone recognized that the issues related to linking WTW and STW are too complex for resolution in a one-hour conversation, April offered to receive and disseminate information from participants who wish to remain in touch with one another.

Goals for the Conversation

- gather ideas
- learn about research other have encountered
- find out about innovative delivery strategies and mechanisms
- learn who's designated fiscal agent in various states
- find out how welfare reform will affect students

Critical Issues

- Turf is a problem. Right now the links between STW and WTW are tenuous; it takes and "act of Congress" to get a participant in one effort enrolled in an opportunity created by the other.
- Challenges of working with welfare recipients who are excited by the prospect of going to work and then disheartened to discover that the rug is being pulled out from under them--i.e., confronted with the difficulties of juggling child care, transportation and the like on a low-wage, low-skill job.
- People are struggling with the question of how to eliminate redundancy in pursuit of employer involvement. We need to streamline and coordinate outreach to employers.
- Educators sometimes resist the notion of integrating STW and WTW.
- Where STW and WTW tend to coordinate best are small communities where integration is rooted in personal contacts.

- Beyond STW & WTW, partnerships need to be established with other education reform efforts, economic development, HeadStart/EvenStart, etc.
- There's a need for employer/supervisor preparation and support--and perhaps for participant peer support groups.

Promising Practices/Strategies

- Create resource exchange composed of all entities and agencies who tap into employers to avoid over-saturation.
- Livingston County (NY) has an effort called "Closing the Revolving Door" that targets participants who repeatedly cycle on and off welfare. Three to six weeks of "re-readiness" training is offered to alumni who have difficulty retaining a job. The goal of the effort is to help participants hold a job for at least a year. The re-readiness training features a half day of work (or community service) and a half day of instruction/training. Upon successful completion of re-readiness training, participants are eligible for a donated, refurbished car. The county is looking at the possibility of maintain a "fleet" of vehicles for use by alumni, but there are liability issues that need to be resolved.
- A Vermont location has attempted to address transportation issues by using a the automotive classes at a tech center to help low-income workers fix their cars.
- It's possible to bring HeadStart into the workplace to offer parenting or literacy classes during lunch. These opportunities could also be used to strengthen links with STW and WTW.
- Volunteer advisory bodies and committees (e.g., HeadStart parent committees) can be used to help WTW participants acquire communication skills and confidence.

Participants

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Issue: How to increase teacher/school involvement in School to Work (STW)

Facilitator: Gary Larese

Problem: As STW programs develop, it remains centered in just a small core group of teachers. How do you get other teachers to buy in and start doing STW?

Ideas, thoughts, comments:

Hold people accountable.

How do we show success? What is success in STW?

School to work increases academic achievement as well as provide improved career related experiences. How do we prove this to others?

Use portfolios as a graduation requirement. Teachers will get involved by default. Only vocational students do portfolios now -- broaden it to other students.

Teachers must be held accountable for STW, but STW coordinators can't make them accountable.

State policies to change to standardized tests has diverted teachers away from STW toward "teaching to the test".

Everybody feels that they are driven by external requirements.

"Throw out the book"; i.e., do STW and let results speak for themselves. Nothing is lost by throwing out the book, but there needs to be strong support from above (i.e., the principal, superintendent, etc.)

Find one other teacher who is positive and pull them in.

Kids are strong recruiters of teachers. Get kids enthused about STW and let them recruit other teachers by asking them for help on their STW projects.

Vermont's portfolio requirements encourage STW.

Community/employer support can be very powerful. They should demand more STW.

Don't do it top down.

Structure the reward system to reward teachers for doing STW.

Teachers themselves need more "real life" experiences.

Make STW coursework and content a required part of teacher education for certification/licensure.

Don't reduce STW to a new "module", i.e., just an "add on" to the regular curriculum.

Develop or purchase "applied academic courses". Teaching academics with a practical bent. Applied labs added to traditional academic experiences. Example: courses developed by CORD -- California Occupational Research and Development. These show traditional teachers how to do their traditional academics with a practical aspect.

Change should be more "evolutionary" than "revolutionary". Be patient.

"This too will pass" syndrome; i.e., teacher fatigue with constant demands for innovation

Government shouldn't give conflicting signals; i.e., encourage STW on one hand while instituting standardized tests on the other.

Teachers and everyone else must come to believe and understand that nothing is lost by doing STW and much is gained.

Participants:

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Connecting Learning and Work: The Rural Experience

Open Space Proceedings

Small Group Discussion

Issue: Work-based Learning in Rural Areas

Facilitator: Hobart Harmon

Discussion:

How do you develop a system/process for identifying work-based experiences in rural areas? What are the elements of the system?

1. What is the definition of work-based learning?
   Definitions of work-based experiences should be made explicit (internship, apprenticeship, mentoring etc.)

2. Need to develop a list of business contacts and resources. This may be found at the Department of Labor, Chamber of Commerce, civic groups, networking, or previous contacts.

3. Survey students to identify their needs or desires regarding work-based experiences. Don't create unwanted experiences.

4. Survey business (mail and personal follow-up) to identify the level of commitment and their business needs.

5. Coordinate work-based activities through one office. It may be located in the district or countywide. One point of contact will better serve the business.

6. Must be aware of the liability issues for the work-based experience. Be aware of insurance and workers compensation requirements for the job and location. Whether the experience is paid or unpaid or whether it is in a large or small company.

7. Some areas need special transportation to get students to the worksite. Time and budget are important issues to consider.

8. If the experience becomes a graduation requirement it becomes institutionalized and made more important in the eyes of students and community. Evaluation and demonstration of the experience is required in the students portfolio.

9. Career awareness should begin in elementary school.

10. Parents should become involved often and early. They may be speakers in the classroom or become valuable networking contacts. Family is important!

11. Small businesses may be overlooked as places to find experiences for students.

Connecting Learning and Work: The Rural Experience

Open Space Proceedings

Small Group Discussion

Issue: Involving employers: community, business and industry in and with school districts for successful School to Work/career partnerships

Problems

1. No employers in the community
2. Problems attracting employers to partnership
3. Develop common terminology
4. Identifying the range of activities that employers can be involved in
5. Employers want model students
6. Employers need to identify what job opportunities existing business, skills required , what is expected of students

Money to pay for coordinator

Suggested Solutions

1. Advisory council 60% business, 40% teachers, parents, students , guidance counselors with an action oriented focus(suggest adding a school board member)
2. Mini-pilot grant to hire a STW coordinator in a school with the understanding that they will be paid for by the district or other funding in year two(1/4 to 1/2 FTE)
3. Mini grant to hire a STW coordinator (20hours a week)
4. Send pictures of employers and students involved in STW to local newspaper, other public relations (PBS, TV ads, PSA's, local awards and endorsements)
5. Notebook identifying the STW activities available at various employers and the inventory of the skills available by teachers in the schools
6. Job Fairs
7. Paid internships for teachers which infuse what they learn into the school 's curriculum
8. Teacher Center grants for innovation grants
9. 1/2 hour presentation to businesses about STW and the benefits to the employer and follow up by requesting individual student placements
10. Work experience coordinators meet regularly at 7AM monthly
11. School district pays for a good breakfast or lunch for the employers
12. Get buy-in from local employers and use their good name as references
13. Have US representatives speak to local businesses to enlist their support for STW
14. For some rural areas develop one student with sole proprietor businesses with no employees
15. Tech prep model in New Jersey

- 3 afternoons a week attend community college
- 2 afternoons a week attend work at the employers business
- paid internship during summers including transportation
- Student evaluation required by employers

Students can earn up to 9 college credits per session and a total of 18 college credits per year
Newark CSD handed out informational brochures on STW, Student Brochure, Employer Shadowing packet

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Connecting Learning and Work: The Rural Experience

Open Space Proceedings

Small Group Discussion

Issue: Extended Time Blocks

Failitator: Ron Milligan, Rhode Island

Discussion: Key topics: How do schools implement project-based learning at secondary school level? What are the various types of block scheduling and how do schools get started? Conclusion: Block scheduling has benefits for school to work programs.

1. Rhode Island: There is a need for block scheduling to facilitate implementation of school to work programs. There are few sources of assistance for interested districts.

2. Western Masachusetts District: School-to-Work (STW) partnership started by businesses. Block schedule option blends well with STW and with Massachusetts option for students to simultaneously take courses for college and high school credit. The block schedule program offers students an opportunity to take four courses intensively throughout a semester. Band and physical education are the only programs which meet every other day throughout the day. The high school principal pushed for block schedules with the community, teachers, students, etc. The program was sold to teachers with a promise to relieve them of lunch room duty, bus duty, and similar responsibilities.

3. Burlington, VT. New high school principal is planning to introduce block scheduling next year.

4. Aother Vermont district: Program mandated by school superintendent and school board. In the first year the block schedule included 45 minutes and 45 minues for band -- rotated throughout the year. Special issues for rural districts: a) difficult to block schedule a subject like math if one teacher must teach at both junior and senior high school levels; b) a distance learning program will dictate how a schedule must be constructed, etc. District representative favored a modified block schedule.

5. New York State: Regents conducted hearings on different scheduling options. Some districts have used blocks which rotate over a 6-day period. Others have used options similar to those described for Western MA. district. A Chautauqua County district in Western NY has herd presentations from districts which had the program forced down the throats of staff and others where there was onsultation. The district is now planning to send teams of teachers, students, and community members to other districts to see block scheduling programs in action.

Connecting Learning and Work: The Rural Experience

Open Space Proceedings

Issue: Labor Issues ***Small Group Discussion***

Facilitators: Dean Monteith

Discussion:

It was determined that many school-to-work personnel responsible for community partnership placements do not address potential labor law issues until a problem arise on the job. It is highly recommended that coordinators develop a contract that clearly explains training expectations to both employers and students. The ability to reduce ambiguity is key to a successful placement.

The group was reminded that the National School-to-Work office provides a resource manual that describes child labor laws as they relate to student job placements.

The state of North Dakota took that document and added to it, and revised it to reflect state statues.

There are many emerging occupations (primarily related to the energy industry i.e.: mining) that will not allow students under the age of eighteen to even visit the job sites. We discussed the possibilities of using video tapes to demonstrate careers in the energy industry. We also discussed the feasibility of establishing energy academies.

In addition, we discussed the possibility of establishing summer camps for career exploration for students from rural areas. It was suggested that these camps use the facilities of state or city universities that are underutilized in the summer.

Connecting Learning and Work: The Rural Experience

Open Space Proceedings
Small Group Discussion

Issue: 1. Career Development as a tool to guide instruction
2. How do we make career exploration meaningful?

Facilitator: Dianne Spang

Discussion: Who owns/assumes responsibility for career development?

- teachers see it as add on
- guidance counselors to busy

How do students prepare to choose courses in middle and high school?

How do we help teachers identify the parts of career development they are already doing?

Applied academics is not occupation specific

skills; how can these courses be more positively promoted?

Career planning needs to start before 11th and 12th grade.

- early science, social studies, math, English/language arts

Teachers should be provided with forums such as inservices for exploring and learning about ideas regarding integrating career exploration.

Academic and vocation teachers should meet to exchange ideas

School districts need to support career development and career exploration. For instance, create a salaried position in each school or district for someone, such as a "school-to-work coordinator" who has the time and autonomy to make necessary contacts with businesses, and community organizations .

Follow up and reflection need to be included as a part of each learners experience in career exploration/development

Students need to be exposed to all aspects of careers; the boring , monotonous, "grunt work", risks involved, hard work, etc. They need to learn what they don't like.

Involve Parents

Middle years, fifth through tenth grade is critical for keeping learners engaged

ISSUE: Utilizing the rural media

FACILITATOR: Sarah Moag

DISCUSSION: Sarah convened the group of seven by expressing a frustration over getting any media coverage. Group members discussed a number of ideas and techniques that have been helpful, but all said it took hard work and perserverance.

- One individual called the local paper and spoke to the editor who assigned a reporter who should be called with potential articles. Over time, a good relationship was established and coverage followed and now the reporter calls for reactions and stories. Trust was established.
- Another suggestion was to have students develop a web page and distribute info over the web since more people have access.
- Another suggested contacting the paper and doing a regular (monthly, Quarterly) article about programs.
- Discussion over negative press that Dean Montieth referred to at lunch: nobody has experienced in their area.
- Suggestion offerred that doing a local call-in talk show on local radio was positive: student and STW discussed STW and answered call-in questions from audience.

General consensus: getting media coverage is hard work and takes continued effort. Must build rapport with reporters, must be courteous, and when reportes leave, must start over again.

Issue: How to recapture Out of School Youth

Facilitator: Laura Weitman, Sullivan county Center for Workforce Development
Discussants: Sylvie Connolly, Wayne-Finger Lakes STW Consortium
Lucille Graczyk, NYS Department of Labor, Geneva
Maureen Boutin, Columbia Greene Community College, Office of Employment and Training

Discussion:

Issue: Howto identify drop-outs once they have left the school system, GED programmed don' identify drop-out youth they simply enroll in OSY program. Issue of confidentiality prevents guidance counselors from providing that information on drop-outs to OSY sevice providers. Interested in proposing how schools take kids back and provide support services such as child care, transportation of youth and of youth with infants.

Vermont Drop out Recovery Program, see Jeannie Crosby, VT State Director, for information. Briefly, model in Bennington, VT was for referrals made by guidance counselors and attach a tutorial center to the technical centers in Vermont for tutoring in academic subjects related to high scool environment. This keeps youth connected to the high school academic eperience and high school diploma. This connection would be made through an advocate. Also allow for re-enrollment of youth in high school (receive high school diploma), enrollment in Vocational Technical Centers or provide for GED. Primary partners: High School, GED Centers, Vocational Technical Center.

Issue: Service to incarcerated youth
Services only provided once youth have been released

Issue: Is the goal of a GED or should it be project-based learning with work experience. Vocational Education centers charge by the month instead of by the year for GED. Have seen half of students enrolled in vocational centers receive a GED with vocational education experience. The idea here is to provide career education, life skills training, career plans for youth. Career plans are important and paid for through JTPA funds for teachers who provide adult basic education services.

Recognize there are different layers to defining out of school youth: potential drop-outs who reman in school, incarcerated youth and those completely removed from the educational setting.

Idea: Internships for OSY, Vermont and NY have had unsuccessful experience. Limited interest by youth is one issue, and resistance by youth demonstrated by their taking advantage of placements. (Robbing employers for whom they worked)

Finger Lakes Region has developed a committee to focus on addressing the needs of out of school youth.

Idea: Pilot intensive paid internships with a hospital with work experience tied to GED which would be provided on-site. GED tied to all aspects of the industry within the hospital.
Model: New visions program in Finger Lakes provides such opportunities for high school seniors who are interested in medical school. An on-site teacher is provided; activity is a structured day: half day GED, half day vocational education.

Another model in Sunset Park, Brooklyn, and Rochester, NY a city-wide medical apprenticeship; hospital hired apprenticeship coordintor to oversee the project.

STW/OSY grants funded through US Department of Labor, just completed second round of funding for pilot sites across the country. Ask your regional office DOL Federal Representative for information about the funded sites.

Focus on being there for the kids should be the mantra from the educational/STW leadership

Transportation a significant issue for OSY who are not financially covered by school district

Idea: create new and improved vocational education programs such as computer repair technicians or networking technicians, improve the electronics program.

STW fund should be spent on guidance counselors to aid in use of labor market information to better steer the youth toward viable careers.

An Alternative High Schools created a computer repair business.

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Connecting Learning and Work: The Rural Experience

Open Space Proceedings

Small Group Discussion

Issue: Sustainability

Facilitator: Peter Butler

Discussion: Issues discussed as follows:

- Money - are we using the funds effectively.
- Need to collaborate on service delivery
- Question: what is it we are trying to accomplish with STW
- Accountability - what has been accomplished
- Will it only reach single school districts
- Five years is not enough time for systemic change
- Need to build awareness and keep people involved
- Need advocacy to drive it.
- Also need evaluative resources provided to funders and lawmakers
- Need a strong leadership role at the state level
- STW is easier to sustain at the local level, may not happen at a state level
- Need a strong message from business
- Sustain STW so it is not "person dependent".
- STW should be identifiable, measurable
- Question: Is a common label necessary or is it the approach that should be sustained
- STW needs to be useful to students, business, etc.
- Goal: to get people to use the system.

Connecting Learning and Work: The Rural Experience

Open Space Proceedings

Small Group Discussion

Issue: Parental Involvement in STW

Facilitator: Kathy Meckle

GENERAL DISCUSSION

All agree that it is hard to convince parents that school-to-work doesn't preclude going to college
Parents have set ideas on what they want their children to do
Parents are a powerful influence
Special education does have parental involvement - possible captive audience for STW
Parents seem to lose interest when children enter middle school - parents have heavy involvement in elementary school - need to figure out how to maintain interest
Traditionally we haven't involved parents at the High School level
Rural schools are probably tighter with schedules than suburban schools
Perception of STW as the "soup du jour" only to be replaced with another issue next year
Rural schools have parents that often wear different hats - parents, employees, employers, school bd
STW often teaches students what they don't want to do - that's OK

WHAT ARE SOME STATES DOING?

Rhode Island is trying to identify state "champions" of STW and has held career fairs

New Jersey is working on cross-training, parent to parent networks, parent manual, holding training sessions for parents at night and on weekends, and having a parent involved at the state level

A district in New York has used a mini-grant to track high school graduates for 5 years to collect data and offer career guidance

Ohio has a Career Passport which documents classes and skills that non-graduating students may use

SUGGESTIONS

- *Work with PTA's to encourage support
- *Start STW early in school - before high school
- *NYS requires middle school assessment - use as an opportunity to keep parents involved
- *Hold events for parents somewhere besides school or BOCES - some parents have an inherent bias against returning to school
- *Encourage schools to share resources - especially in rural areas
- *Approach employees as parents
- *Do a video infomercial for parents
- *Build on kids part-time jobs as part of STW
- *Encourage kids to build on STW to pay for college education
- *Kids can be the best ambassadors of STW - help them get the word out
- *Keep STW message positive - kids must have a positive experience or it doesn't work

Issue:

What is technical assistance?

Facilitator:

Bonnie Helen Waite

Discussion:

The discussion of technical assistance featured more questions than answers, however we anticipate that the technical assistance notebook will provide some of what we wanted to know. We wondered:

- What kinds of technical assistance are available?
- How do I get it?
- Is technical assistance the same thing as staff development?
- Are BOCES a source of assistance?
- How do I find out whether a school has a school-to-work program?

Connecting Learning and Work: The Rural Experience

Open Space Proceedings

Small Group Discussion

Issue: What Do You Do When Your Employer Base Becomes Saturated?

Facilitator: Kris Reuland

Discussion :

o Frequently many students will want to become involved in thr same type of shadowing - work/ experience internship (ie: law enforcement). This places unreasonable demands on a business / industry / organization and may discourage them from taking students.

o On the other hand.....

Once an internship site is developed some students may not elect to select this site every year. It is sometime difficult to keep these businesses involved.

o Independent contractors , particularly in the trade areas , do not have the time to work with an intern because they are frequently paid at an hourly rate and the internship would have a negative impact on their income.

o How do you recover an internship site if an employer has a bad experience with a student ? It is important to mahe the employer aware of the strengths and weaknesses of students assigned to them. Honesty is important when the coordinator makes the placement.

Group Two: Entrepreheurship in the Schools:

Group included three students who were prospecting for STW ideas to bring to their home school. Their guidance counselor suggested they attend this conference.

Group convened by doing a go-Round which allowed other wisdom to be shared.

o One member talked about the two school run enterprises that have been started with STW funding: a greenhouse and a desk top publishing. business.
- The greenhouse has caused some community controversy. Their are other growers in the community and this school run business is seen as unfair competition. Hearing this some group members emphasized the importance of doing a business plan before jumping into something. Compatibility in the community is important. School run businesses benefit from local support.
- The desktop publishing is a big success. It does not have local competition.

o One member interested in integrating the curriculum with the school run business.

o School run businesses are a natural for applied learning, research, etc.

o Parent member wante schools to look and act more like businesses. Many things done in schools such as fund raising need to be approached from a more business like approach.

o Important to know the regulations regarding school run businesses. Questions about sale tax (schools don't have to pay it and where do the profits go came up)

o In small schools, the school run enterprise is seen as a way to connect the whole school K-12.

o Middle schools seem to be a place to start school run businesses. Teachers need to always be on the scout for new recruits.

o Business that is going to sell to kids must research what kids will buy. Students in the group talked about manufacturing shelves for lockers that were a big success in their school.

o Students after the general discussion said they liked the idea of student run business better than an internship. They said they could be more proactive, more involved, and

basically have more fun. Interacting with peer group would be less threatening than relating to a thirty-forty year old adult.

o Remember to do the all important business plan. The school run business needs to operate in the black.

o One member said his dream was to have a school run enterprise in every school. Sounds like the ultimate STW!

Group members:

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Connecting Learning and Work: The Rural Experience

Open Space Proceedings

Small Group Discussion

Issue: Transportation

Facilitator: Constance Carroll

Discussion: How to Transport STW Students to Work Experience?

Questions?????
What can schools afford?
How can schools maintain transportation?
How to overcome license issues?
How to resolve insurance issues?
How to pay for fuel?
How to capture instruction time lost on bus transportation?

CURRENT SOLUTIONS

1. parental involvement

2. Waivers for teachers to transport students

3. Use component school during the school day

4. Employer transports students

5. Map school routes and work locations to find loci points

6. The position of Assistant STW Coordinator/Director transports students to work sites.

7. Job Coaches be allowed by Schools to transport students

PROPOSED SOLUTIONS

1. Legislation to remove restrictions that do not permit students to transport other students in privately owned vehicles

2. Collaboration with other agencies, institutions, associations that transport specific groups i.e. Head Start, Veterans, ARC, Senior Citizens

3. Hiring a bus service

4. Purchase small economy vehicles vs buses when purchasing new school transportation

5. Schools provide transportation services for community groups when buses , vans, economy vehicles are not transporting STW students. Entrepreneurship.

6.Install VCR's on buses to teach students during travel (long distance learning)

Connecting Learning and Work: The Rural Experience

Open Space Proceedings

Small Group Discussion

Issue: How can you get students and faculty involved in STW?

Facilitator: Jennifer Carroll

Discussion:

one issues that a VT School District (sd) has: how do you identify what STW is, how do you motivate students and teachers. -- they don't have much student involvement

kinda chicken and egg question - will students motivate teachers or teachers motivate students?

in a NY sd job shadows are required.

- they got teachers into STW through summer internships with industry - teachers need to understand the process of industry then bring their experiences back to school. Applied through application process, interviews, many teachers interested in participating. At first grants provided stipends, then industry paid for it. -- also an important component - involvement with local colleges to build on curricula

* ADMINISTRATIVE BUY-IN important - if admin. likes idea, teachers will follow

present your info. hopefully the administrator will agree with the idea. If not, try another administrator in another school. Chances are if one school buys in and it starts working, other administrators will wonder how they can get their school involved

what do you do when the admin. buys in but has no leadership?

maybe then concentrate on students and teachers.

STUDENTS CAN

write articles in the school paper about STW experiences
present their experiences to the board
contribute their ideas for business links to coordinator
be involved on the local STW partnership committee

TEACHERS CAN

collaborate together to integrate interdisciplinary curricula
talk about how lessons tie into college courses, future jobs
ask students if they have an idea what they want to be - then teachers will know on a personal basis how the lesson relates to the student, maybe do a lesson targeted to that career
tie applicable uses into the curricula

BUILD STW SLOWLY

take small steps, complete distinct tasks that employers involved on planning can see dedication to action. for ex. career placement center where com. college rep will advise, students can work on resume and job search.

One STW program in NY -

Sophomores concentrate on one career area and do the following:

- research career
- write resume, letter
- employers explain career
- mock interview with real employer in school
- award ceremony where employer "hires" a student, describes what the student did well in interview
- all students in particular career area will job shadow with same employer

Juniors then research a topic, writes a BIG paper, job shadows or sometimes interns with related career, makes presentation on topic.

Connecting Learning and Work: The Rural Experience

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Small Group Discussion

Issue: DEVELOPING CAREER PATHWAYS
(IN THE COMPREHENSIVE HIGH SCHOOLS)

Facilitator: Howard Garey

Discussion:

Example of successful model high school program in New Hampshire (Winnicuttic?) near seacoast area. All students there choose from one of six career pathways by end of 10th grade and all classes for 11/12 are taught within that scope.

How do we get college bound students involved in career pathways, STW?

Work-based learning component important for ALL students

Transferable skills necessary- how do we teach? (Group/team work, communication skills, etc.)

What happens to students who are not ready to fit into a career path by grade 11- do they slip through the cracks?

Can students change career majors if they want? When?

Scheduling issues always a problem- need flexibility to make sure students get all their required courses.

Can students still access the technical centers when in an academic career path at the high school?